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RESEARCH REPORT

SURVEY & ANALYSIS OF SALARY TRENDS 1989

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Survey and Analysis of Salary Trends, 1989

Foreword

This reference document supports state federations and locals in developing salary comparisons and formulating policy. While serving as the primary vehicle for reporting the results of the American Federation of Teachers annual survey of state departments of education, several other data sources are utilized, as noted in Appendix B. Data from the AFT's annual survey of local unions is available in a separate publication titled, AFT Local Union Teacher Salary Survey 1989.

Data include national average salaries or earnings for teachers, other school employees, government workers and professional employees over the past 25 years. In many instances, these data are reported by state, especially for recent years. Beginning salaries for teachers and other college graduates over the past 15 years are reported. The AFT's survey of state departments of education also asked states to provide information on actual beginning salaries, experienced teachers reentering the classroom, retirement rates and teacher age and experience. For the most part, data from the survey of state departments of education are reported as received from the states. In some instances, data were confirmed by telephone. Qualifications to the data, if any, are noted in Appendix A and in the notes to some tables. Many states are still refining data, and any changes reported to the AFT Research Department will be incorporated into next year's report. Updated data relating to last year's report has been incorporated into this document.

Comparisons with the various tables can be developed to suit the purposes of a particular local or state federation, whether it is to consider trends, establish the position of members relative to similar professionals, or make meaningful and valid comparisons among states. The first section of this report focuses on state comparisons. The second section highlights trends in national averages. The third section focuses on beginning teachers, with supplemental information on experienced teachers reentering the profession and teacher retirement.

The Department of Research staff is grateful to the various locals, state agencies and state agency employees who provided the information and suggestions for this report. Peggy Williams Smith of the Research Department staff helped prepare the manuscript and assisted in other aspects of this report. Helen Nemorin helped to collect data, edit the report and lay out the final manuscript. Frances Tilman, Roza Makonnen and Monika Tharapatla entered data or helped with other aspects of the report.

Data used in this report and copies of the tables are available on microcomputer diskette and can be obtained by writing to the AFT Department of Research.

Highlights

State Comparisons

- The average teacher salary for 1988-89 of approximately $29,629 represents a 5.5 percent increase over the previous year's average salary of $28,071.

- Alaska had the highest average salary at $41,832, or 141 percent of the national average. South Dakota had the lowest average salary at $20,525, or just 69 percent of the national average.

- Connecticut reported the highest average salary increase -- 11.5 percent for 1988-89. New Hampshire posted an 11.2 percent gain and salaries rose 10.1 percent in Hawaii. No state reported an average salary decline, but in West Virginia salaries increased by less than one percent.

- Hawaii, New Hampshire and Connecticut all reported average teacher salary increases of more than 20 percent over the past two years.

- Since the 1980-81 school year, the average teacher salary in Connecticut has improved by more than 116 percent, and in Vermont and New Hampshire, average salaries improved by 100 percent. The U.S. average increased only 69 percent.

- An adjustment for interstate differences in the cost of living shows that Michigan, Alaska, California, Minnesota, Wisconsin and New York pay teachers the most. A similar adjustment places Louisiana, Arkansas, West Virginia and South Dakota on the bottom.

- Estimated expenditures per pupil in membership (from current funds) averaged $4,246 per pupil in 1988-89, ranging from a low of $2,490 in Utah to $6,991 in Alaska, with New York, Connecticut and New Jersey also spending more than $6,000 per pupil.

Trends Compared to Other Workers and Professions

- The 1988-89 average teacher salary of $29,629 is the highest-ever average salary, but just $700 more than the $28,892 (in 1989 dollars) average teacher salary recorded in 1972.

- In both 1956 and 1981, teacher salaries matched the mean annual earnings of the full-time worker in the U.S. economy, but teachers gained an 18 percent advantage by 1988 -- slightly above the 14 percent advantage they enjoyed in 1971.

- Teachers earned 12 percent more than the average government worker in 1988, about the same as the 11 percent advantage they enjoyed in 1962, 1968 and 1969.

- The full-time, year-round male worker earned 11 percent more than the average teacher in 1987 -- the smallest gap in 23 years.

- Female full-time, year-round workers experienced increased earnings compared to teachers every year over the 1970s, but working women have gained less than teachers during the recent period of rapidly rising teacher salaries. The average earnings figure of women in 1988 falls short of the average teacher salary by 29 percent, the lowest level since 1977.

- While salaries in other white-collar occupations remain high compared to teachers (ranging from 97 percent more for attorneys to 18 percent more for accountants), the earnings advantage of these white-collar occupations tends to be at the lowest level since the early 1980s and is lower than in 1962.

- In 1989, the salary growth of both full professors and assistant professors at public institutions outpaced the average salary increase of teachers. For the first time since 1981, lawyers' average salary increased at a faster rate (6.2 percent) than teachers (5.5 percent).

- Teacher salaries rose about the same as administrator salaries during the 1988-89 school year, slightly faster than salaries for secretaries, but about the same as the rate of increase for teacher aides and custodians.

Beginning Teachers

- The average beginning teacher salary of $19,598 in 1988-89 rose 5.8 percent from the previous year compared to the average teacher salary increase of 5.5 percent.

- Fourteen states have starting salaries exceeding $20,000.

- Alaska, California, Connecticut, Hawaii and New York have starting salaries in excess of $22,000, while only Idaho, North Dakota, South Dakota and West Virginia report average starting salaries below $16,000.

- Beginning offers in business for new college graduates remained high compared to beginning teachers in 1988 (ranging from 49 percent more for engineers to 18 percent more for liberal arts graduates).

- For the second straight year, the earnings advantage of college graduates in accounting, sales/marketing, liberal arts or economics/finance increased over beginning teachers. Earnings increased at a slower rate in engineering, math/ statistics, and computer science than they did for beginning teachers.

- Beginning offer data for 1988 college graduates indicates starting salaries will rise for accountants by 9.2 percent, for sales/marketing occupations by 11.9 percent, and for liberal arts graduates by 10.9 percent.

- Beginning teachers comprised approximately 3.6 percent of the classroom teacher work force in 1987-88 (37 states reporting data), as much as 3.4 percent in 1986-87 (33 states reporting data), and about 3.8 percent in 1988-89 (33 states reporting data).

- Based on data from 25 states, the number of experienced teachers reentering the classroom exceeded the number of beginning teachers in both 1987-88 (4.1 percent of the teaching force) and 1988-89 (4.3 percent).

- The retirement rate (which includes nonteaching professional personnel in some states), ranging from a high of 3.9 percent of classroom teachers in Ohio to a low of 1.0 percent in South Dakota, averaged 2.0 percent for 28 states reporting data in 1987-88.

FIGURE 1

AVERAGE TEACHER SALARY 1988-89

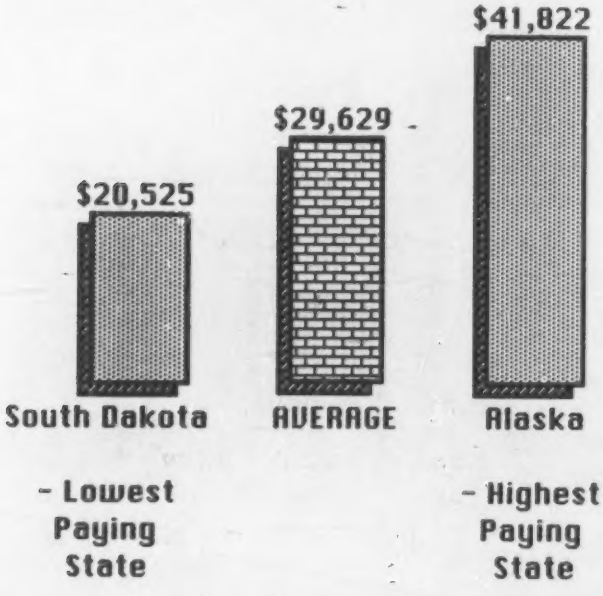

Figure 2

AVERAGE BEGINNING TEACHER SALARY 1988-89

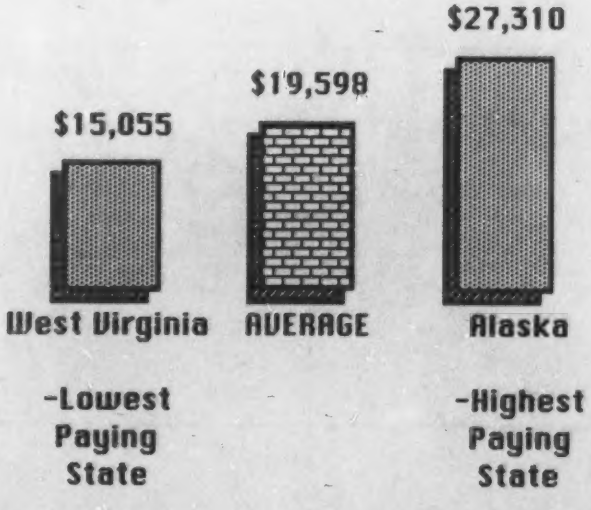

Figure 3

INFLATION CLOSES IN ON TEACHER SALARIES

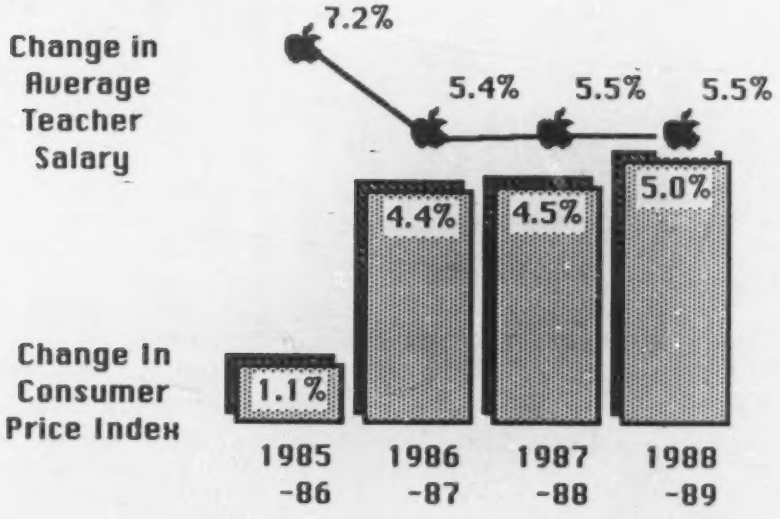

Figure 4

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AVERAGE TEACHER SALARY IN 1989 DOLLARS

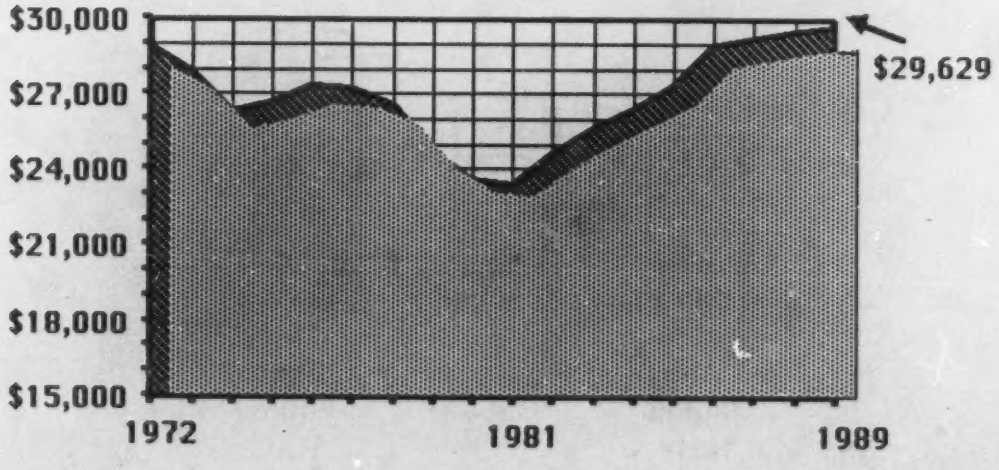

Figure 5

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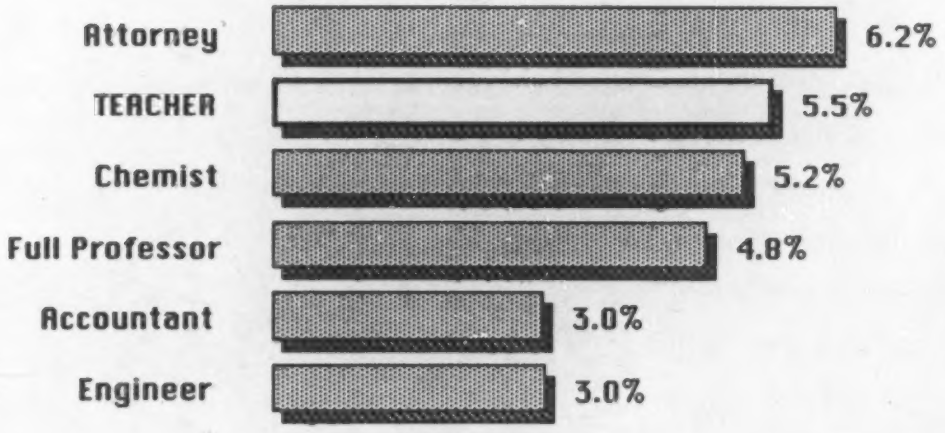

Figure 6

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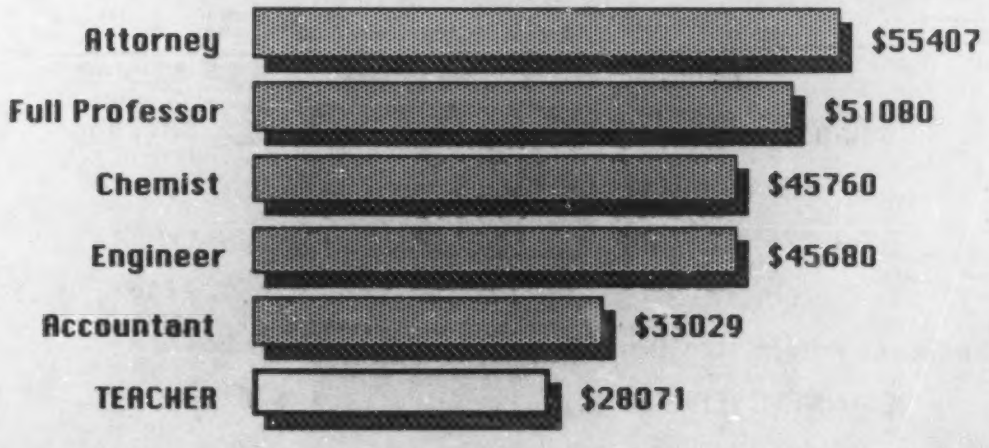

Figure 7

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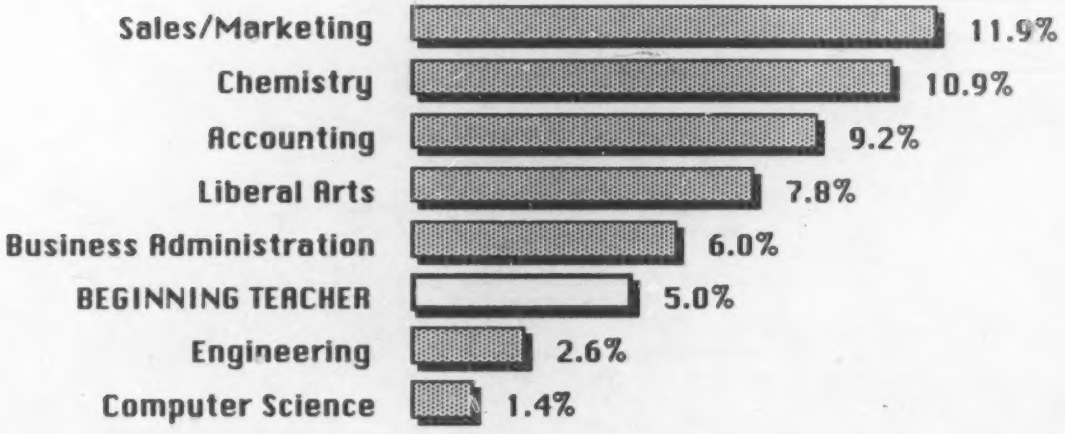

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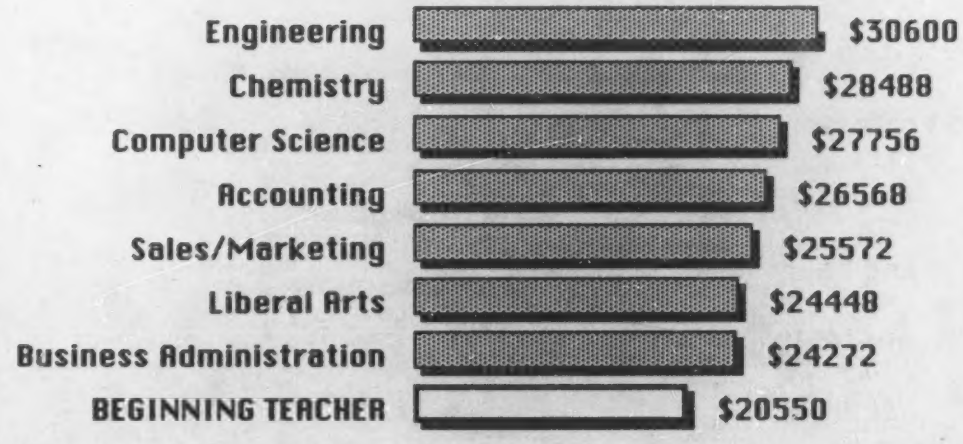

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I. State Comparisons

Developments in Teacher Salaries, in 1988-89. In 1988-89, the average public elementary and secondary school teacher in the United States earned a salary of approximately $29,629, an increase of 5.5 percent over the previous year. Not unexpectedly, Alaska had the highest average salary at $41,832 followed by Connecticut with $37,659. As shown in Table I-1, the District of Columbia, New York, Michigan, and California all had average salaries over $35,000 -- about 18 to 25 percent above the national average. South Dakota ranked last with an average salary of $20,525. West Virginia and Arkansas also had average salaries below $22,000. Beginning teachers in five states averaged more than $22,000 (See Table III-1).

Connecticut again reported the highest salary increase--11.5 percent for 1988-89 (see Table I-2). The increase boosted Connecticut to the second highest-paying state from the fifth highest-paying state the year before. New Hampshire and Hawaii posted 10 percent gains. Hawaii moved from the 22nd ranking in 1986-87 to the 13th ranking in 1988-89. New Hampshire moved from the 42nd to the 29th ranking over the three-year period. No state experienced an average salary decline in 1988-89. Over the past two years, Connecticut, New Hampshire, Hawaii, Maryland, and Maine reported the greatest gains, ranging from 17 percent to nearly 30 percent. Over the past two years, average salaries decreased in Alaska, Wyoming, and Utah.

Gains During the 1980s. Eight-year trends appear in Table I-3. The average salary grew by more than 100 percent in Connecticut, Vermont and New Hampshire compared to the national average of 69 percent. Average salaries improved less than 50 percent over the eight-year span in Hawaii (48 percent), West Virginia (46 percent), Washington (37 percent), Wyoming (48 percent) Alaska (44 percent), Louisiana (36 percent) and Utah (36 percent).

Teacher Salaries Compared to the Average Annual Eranings of All Workers. States vary considerably among each other according to their economic condition and the cost of living. Table I-4 compares the average teacher salary to the average annual earnings of all workers, including part-time workers, in the private sector. The annual pay data apply to workers covered by State and Federal Unemployment Insurance programs and are compiled from reports submitted by employers for more than 93 million workers. Generally excluded from unemployment insurance are most agriculture workers on small farms, railroad workers, most domestic employees, student workers and the self-employed. This comparison serves only as an index to adjust for unique conditions within each state and to facilitate interstate comparisons. It is not presented as a standard by which to judge how much teachers should get paid relative to the average worker.

As measured by the ratio of the average teacher salary in 1988-89 to the estimated average annual earnings in the private sector in 1988, Rhode Island ranks first, with a

ratio of 1.84 compared to the national average of 1.40. Several high-paying states including New York, New Jersey, Michigan and the District of Columbia fall to the middle. Twenty-seven states have a ratio of between 1.35 and 1.50. While some states argue that they cannot pay teachers well because the taxpayers in the state do not get paid well, states with the lowest average teacher salaries tend to rank lowest when teacher salaries are compared to the average worker. However, the state paying teachers the least, South Dakota, ranks 28th according to the ratio. North Dakota and Mississippi also improve their ranking substantially.

The ranking according to the ratio of the average teacher salary to private sector employee earnings for 1981 is shown as the last column of Table I-4. The rankings of several states changed dramatically over the intervening six years. Massachusetts, North Carolina, New Mexico and Illinois fell about 20 positions. Alaska, Wyoming, and Connecticut gained the most in the rankings.

Teacher Salaries Compared to Per Capita Personal Income. Table I-5 is constructed similarly to Table I-4, except that teacher salaries are compared to per capita personal income in the state. Personal income is a combination of earnings in the workplace, minus contributions for social insurance, plus dividends, interest, rent and transfer payments. Per capita income varies among states because of cost-of-living differences, differing concentrations of poor people and demographic factors (e.g., families are large in Utah, thus driving down per capita income). Again, the comparison to personal income is only an index designated to enhance interstate comparison, not a standard by which to judge how much teachers should be paid. Because 1988-89 average teacher salaries are compared to 1988 per capita personal income, the ratio of the two measures slightly overstates how much teachers earn relative to the per capita income.

The national average of the teacher salary to the per capita personal income ratio is 1.80, down from 1.83 in 1987-88 and 1.85 in 1986-87, but still above the ratio of 1.77 in 1981. A total of 23 states had a ratio of between 1.70 and 1.90. Michigan, Alaska, Mississippi, Rhode Island and Wyoming have the highest ratios. These states cover every region of the country. Six states paying teachers less than the national average -- New Mexico, Alabama, South Carolina, Indiana, Wyoming and Mississippi -- rank in the top 10. Several high paying states -- Connecticut, New Jersey, Massachusetts and Virginia -- rank in the bottom 10.

Teacher Salaries Adjusted by the AFT Cost-of-Living Index. While the greatest variation in cost-of-living occurs within a state between rural and urban locations, a cost-of-living adjustment among states makes sense when states serve as the basis of comparing earnings. Cost-of-living variations among states are considered in adjusting and reranking the average teacher salary displayed in Table I-6.

The interstate cost-of-living index developed by the AFT Research Department

uses existing data on the cost of living in a majority of the nation's SMSAs to develop cost-of- living indices for each state. Using regression techniques, models for each of four regions were developed to explain differences in the cost-of-living between SMSAs. The regressions coefficients were then used as weights and combined with comparable state level data to establish the state cost-of-living index. The state cost-of-living index was normalized so that 1.00 represents the national average for all states weighted by their population. Details of the index and the methodology are available from the AFT Research Department. The AFT index is a revision of the index presented in the 1988 version of this report. The 1987 version of this report contained a similar cost-of-living index developed by Walter W. McMahon and Carrol Melton ("Measuring Cost of Living Variation," Industrial Relations, Vol. 17, No. 3, 1978 p. 331).

Michigan, Alaska, California, Minnesota, Wisconsin and New York rank as the highest-paying states after adjusting for the cost of living. New York, Alaska and California, despite relatively high indexes still list in the top 10. High-paying Connecticut, Massachusetts, the District of Columbia and New Jersey drop substantially in the rankings. South Dakota, West Virginia, Arkansas, Louisiana and North Dakota remain at the bottom despite low cost-of-living. The rankings of most southern states improve when the cost-of-living variation is accounted for.

Expenditures Per Pupil in 1988-89. During 1988-89, approximately $4,246 in current funds (a figure excluding debt service and bond and construction expenses) were spent on each enrolled pupil (measured by October 1 membership or comparable figure) in the typical state. Expenditures per pupil rose by 6.6 percent over the 1987-88 estimate of $3,984, and by a full 13.8 percent over the 1986-87 expenditure figure. In contrast, the average teacher salary had a one-year gain of 5.5 percent and a four-year gain of 11.3 percent (Table I-2).

Most of the estimates in Table I-7 and Table I-8 are based on actual data reported by states but are adjusted to reflect the definition of expenditure per pupil in membership reported by the U.S. Department of Education. In an earlier version of this AFT report, the 1986-87 U.S. average expenditure per pupil was estimated to be $3,713 while the final revised expenditure reported by the U.S. Department of Education was $3,731. As shown in Table I-7, Alaska spent an estimated 65 percent more than the national average, followed by New Jersey, Connecticut, New York and the District of Columbia, each spending at least 35 percent more than the national average. Utah, Mississippi and Alabama spent under $2,600 per pupil. State rankings for per pupil expenditures and average teacher salary did not always match closely. California, for example, ranked 19th on expenditures per pupil, but the state has the 6th highest average teacher salary.

Regional Rankings. Perhaps the most common way to improve interstate comparisons is to make comparisons within the same region, as in Table I-9. Figured this

way, Connecticut paid the most in New England; Washington, D.C. topped the Mid-east; Michigan paid the most in the Great Lakes area; Minnesota ranked first among Plains states (and would rank second if put in the Great Lakes region); Virginia topped the Southeast; Arizona ranked highest in the Southwest; Colorado outpaced Wyoming in the Rocky Mountain region; and, excluding Alaska, California easily ranked highest in the Far West.

TABLE I–1

THE AVERAGE TEACHER SALARY IN 1988–89, STATE RANKINGS

Rank	State	Average Salary		Percent of U.S. Average
1	Alaska	$41,832		141.2%
2	Connecticut	37,659		127.1%
3	D.C.	36,787	b	124.2%
4	New York	36,654	c	123.7%
5	Michigan	35,530	b	119.9%
6	California	35,172	b	118.7%
7	Rhode Island	34,234	a	115.5%
8	Maryland	33,900		114.4%
9	New Jersey	32,862		110.9%
10	Massachusetts	32,200	b	108.7%
11	Delaware	31,585		106.6%
12	Minnesota	31,395	b	106.0%
13	Hawaii	31,307		105.7%
14	Pennsylvania	31,248		105.5%
15	Illinois	31,195		105.3%
16	Wisconsin	31,046		104.8%
17	Colorado	29,557	f	99.8%
18	Oregon	29,385	g	99.2%
19	Indiana	29,169	a	98.4%
20	Ohio	29,166		98.4%
21	Washington	29,146	a	98.4%
22	Virginia	29,056	a	98.1%
23	Nevada	28,836		97.3%
24	Arizona	28,499		96.2%
25	Wyoming	27,689		93.5%
26	Florida	26,971	a	91.0%
27	Georgia	26,920		90.9%
28	Vermont	26,819		90.5%
29	New Hampshire	26,703		90.1%
30	Texas	26,513	a	89.5%
31	Kansas	25,992	b	87.7%
32	Missouri	25,981		87.7%
33	Iowa	25,884		87.4%
34	North Carolina	25,650		86.6%
35	Tennessee	25,619		86.5%
36	Alabama	25,190	a	85.0%
37	South Carolina	25,060	a	84.6%
38	Maine	24,938		84.2%
39	Kentucky	24,920	a	84.1%
40	New Mexico	24,554		82.9%
41	Montana	24,421		82.4%
42	Nebraska	23,845	a	80.5%
43	Oklahoma	23,400	a	79.0%
44	Utah	23,023	a	77.7%
45	Idaho	22,732		76.7%
46	Mississippi	22,579		76.2%
47	Louisiana	22,469		75.8%
48	North Dakota	22,249		75.1%
49	West Virginia	21,904		73.9%
50	Arkansas	21,736		73.4%
51	South Dakota	20,525		69.3%
	U.S. AVERAGE	**$29,629**		**100.0%**

a=estimate or preliminary; b=AFT estimate; c=median; f=calendar year
g=includes 6% pension pick-up.

TABLE I–2

TRENDS IN THE AVERAGE SALARY, 1986–87 TO 1988–89

State	Average Salary 1986–87	Rank	Average Salary 1987–88	Rank	Average Salary 1988–89	Rank	Percent Change 1986–87 to 1987–88	Percent Change 1987–88 to 1988–89	Percent Change 1986–87 to 1988–89
Alaska	$42,063	1	$41,190	1	$41,832	1	-2.1%	1.6%	-0.5%
Connecticut	29,170	7	33,776	5	37,659	2	15.8%	11.5%	29.1%
D.C.	33,797	2	34,705	2	36,787	3	2.7%	6.0%	8.8%
New York	32,000	3	34,500	3	36,654	4	7.8%	6.2%	14.5%
Michigan	31,528	4	34,080	4	35,530	5	8.1%	4.3%	12.7%
California	31,276	5	33,159	6	35,172	6	6.0%	6.1%	12.5%
Rhode Island	31,079	6	32,858	7	34,234	7	5.7%	4.2%	10.2%
Maryland	28,893	9	30,933	8	33,900	8	7.1%	9.6%	17.3%
New Jersey	28,718	10	30,778	9	32,862	9	7.2%	6.8%	14.4%
Massachusetts	28,922	8	30,379	10	32,200	10	5.0%	6.0%	11.3%
Delaware	27,467	15	29,573	13	31,585	11	7.7%	6.8%	15.0%
Minnesota	28,339	11	29,900	11	31,395	12	5.5%	5.0%	10.8%
Hawaii	26,093	22	28,445	17	31,307	13	9.0%	10.1%	20.0%
Pennsylvania	27,422	16	29,177	15	31,248	14	6.4%	7.1%	14.0%
Illinois	28,212	13	29,667	12	31,195	15	5.2%	5.2%	10.6%
Wisconsin	27,815	14	29,206	14	31,046	16	5.0%	6.3%	11.6%
Colorado	27,387	17	28,651	16	29,557	17	4.6%	3.2%	7.9%
Oregon	26,691	20	28,060	19	29,385	18	5.1%	4.7%	10.1%
Indiana	25,616	24	27,028	25	29,169	19	5.5%	7.9%	13.9%
Ohio	26,288	21	27,606	20	29,166	20	5.0%	5.7%	10.9%
Washington	27,285	18	28,217	18	29,146	21	3.4%	3.3%	6.8%
Virginia	25,041	25	27,193	23	29,056	22	8.6%	6.9%	16.0%
Nevada	26,962	19	27,599	21	28,836	23	2.4%	4.5%	7.0%
Arizona	25,972	23	27,388	22	28,499	24	5.5%	4.1%	9.7%
Wyoming	28,230	12	27,141	24	27,689	25	-3.9%	2.0%	-1.9%
Florida	23,833	29	25,198	28	26,971	26	5.7%	7.0%	13.2%
Georgia	24,632	27	25,736	26	26,920	27	4.5%	4.6%	9.3%
Vermont	23,089	37	24,507	33	26,819	28	6.1%	9.4%	16.2%
New Hampshire	21,869	42	24,019	36	26,703	29	9.8%	11.2%	22.1%
Texas	24,890	26	25,558	27	26,513	30	2.7%	3.7%	6.5%
Kansas	23,459	33	24,647	32	25,992	31	5.1%	5.5%	10.8%
Missouri	23,435	34	24,709	31	25,981	32	5.4%	5.1%	10.9%
Iowa	22,615	39	24,858	30	25,884	33	9.9%	4.1%	14.5%
North Carolina	23,775	30	24,900	29	25,650	34	4.7%	3.0%	7.9%
Tennessee	23,526	31	23,785	38	25,619	35	1.1%	7.7%	8.9%
Alabama	23,500	32	23,320	41	25,190	36	-0.8%	8.0%	7.2%
South Carolina	23,201	36	24,403	34	25,060	37	5.2%	2.7%	8.0%
Maine	21,257	47	23,425	40	24,938	38	10.2%	6.5%	17.3%
Kentucky	22,467	41	24,253	35	24,920	39	7.9%	2.8%	10.9%
New Mexico	24,155	28	23,958	37	24,554	40	-0.8%	2.5%	1.7%
Montana	23,340	35	23,774	39	24,421	41	1.9%	2.7%	4.6%
Nebraska	21,797	43	22,683	43	23,845	42	4.1%	5.1%	9.4%
Oklahoma	22,563	40	22,773	42	23,400	43	0.9%	2.8%	3.7%
Utah	23,035	38	22,572	44	23,023	44	-2.0%	2.0%	-0.1%
Idaho	21,476	44	22,242	45	22,732	45	3.6%	2.2%	5.8%
Mississippi	19,448	50	20,562	50	22,579	46	5.7%	9.8%	16.1%
Louisiana	21,196	48	21,209	48	22,469	47	0.1%	5.9%	6.0%
North Dakota	21,284	46	21,660	47	22,249	48	1.8%	2.7%	4.5%
West Virginia	21,446	45	21,736	46	21,904	49	1.4%	0.8%	2.1%
Arkansas	19,904	49	21,133	49	21,736	50	6.2%	2.9%	9.2%
South Dakota	18,781	51	19,758	51	20,525	51	5.2%	3.9%	9.3%
U.S. AVERAGE	$26,615		$28,071		$29,629		5.5%	5.5%	11.3%

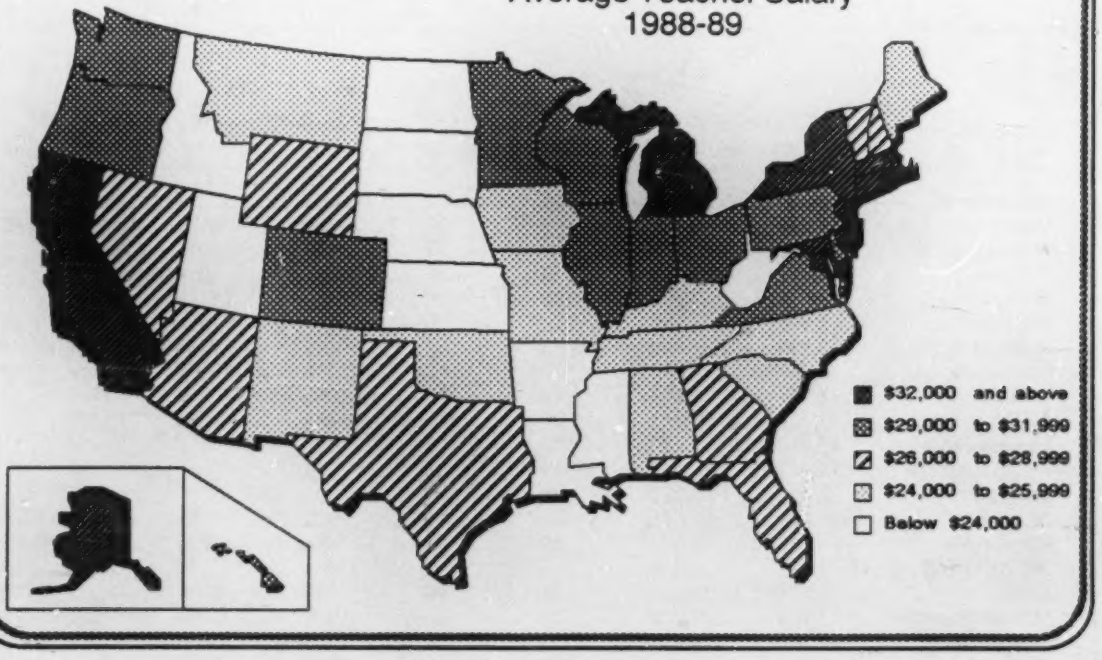
TABLE I–3

AVERAGE TEACHER SALARIES FOR 1980–81, AND 1988–89

State	—Average Salary— 1980–81	1988–89	—Rank— 1980–81	1988–89	Percent of —U.S. Average— 1980–81	1988–89	Change 1980–81 to 1988–89	Rank
Connecticut	$17,404	$37,659	21	2	99%	127%	116.4%	1
Vermont	13,006	26,819	51	28	74%	91%	106.2%	2
New Hampshire	13,412	26,703	48	29	76%	90%	99.1%	3
Virginia	15,535	29,056	33	21	89%	98%	87.0%	4
New Jersey	18,245	32,862	13	9	104%	111%	80.1%	5
Maryland	18,998	33,900	10	8	108%	114%	78.4%	6
Maine	13,994	24,938	45	38	80%	84%	78.2%	7
Minnesota	17,777	31,395	18	12	101%	106%	76.6%	8
Wisconsin	17,607	31,046	20	16	100%	105%	76.3%	9
Florida	15,406	26,971	36	26	88%	91%	75.1%	10
Pennsylvania	17,890	31,248	17	14	102%	105%	74.7%	11
South Carolina	14,353	25,060	44	37	82%	85%	74.6%	12
Georgia	15,445	26,920	34	27	88%	91%	74.3%	13
Delaware	18,205	31,585	14	11	104%	107%	73.5%	14
Mississippi	13,017	22,579	50	46	74%	76%	73.5%	15
Rhode Island	19,803	34,234	8	7	113%	116%	72.9%	16
Ohio	16,904	29,166	24	19	96%	98%	72.5%	17
Massachusetts	18,703	32,200	12	10	107%	109%	72.2%	18
New York	21,326	36,654	3	4	122%	124%	71.9%	19
Kansas	15,250	25,992	37	31	87%	88%	70.4%	20
California	20,729	35,172	7	6	118%	119%	69.7%	21
Tennessee	15,118	25,619	39	35	86%	86%	69.5%	22
Texas	15,728	26,513	32	30	90%	89%	68.6%	23
Missouri	15,421	25,981	35	32	88%	88%	68.5%	24
Michigan	21,213	35,530	5	5	121%	120%	67.5%	25
Arizona	17,201	28,499	23	23	98%	96%	65.7%	26
Alabama	15,205	25,190	38	36	87%	85%	65.7%	27
Colorado	17,917	29,557	16	17	102%	100%	65.0%	28
Arkansas	13,273	21,736	49	50	76%	73%	63.8%	29
Nevada	17,700	28,836	19	22	101%	97%	62.9%	30
Oregon	18,047	29,385	15	18	103%	99%	62.8%	31
North Carolina	15,858	25,650	30	34	90%	87%	61.7%	32
Oklahoma	14,492	23,400	43	43	83%	79%	61.5%	33
D.C.	22,882	36,787	2	3	130%	124%	60.8%	34
Illinois	19,425	31,195	9	15	111%	105%	60.6%	35
North Dakota	13,864	22,249	46	48	79%	75%	60.5%	36
Iowa	16,131	25,884	28	33	92%	87%	60.5%	37
Nebraska	14,882	23,845	42	42	85%	80%	60.2%	38
Kentucky	15,750	24,920	31	39	90%	84%	58.2%	39
Indiana	17,255	27,009	22	25	98%	91%	56.5%	40
Montana	15,954	24,421	29	41	91%	82%	53.1%	41
Idaho	15,109	22,732	40	45	86%	77%	50.5%	42
South Dakota	13,674	20,525	47	51	78%	69%	50.1%	43
Hawaii	21,147	31,307	6	13	121%	106%	48.0%	44
Wyoming	18,718	27,689	11	24	107%	93%	47.9%	45
West Virginia	14,948	21,904	41	49	85%	74%	46.5%	46
New Mexico	16,812	24,554	26	40	96%	83%	46.1%	47
Alaska	29,048	41,832	1	1	166%	141%	44.0%	48
Washington	21,268	29,146	4	20	121%	98%	37.0%	49
Utah	16,864	23,023	25	44	96%	78%	36.5%	50
Louisiana	16,557	22,469	27	47	94%	76%	35.7%	51
U.S. AVERAGE	$17,544	$29,629			100%	100%	68.9%	

Map 1

Average Teacher Salary 1988-89



Map 2

Average Teacher Salary Increase 1980-81 to 1988-89

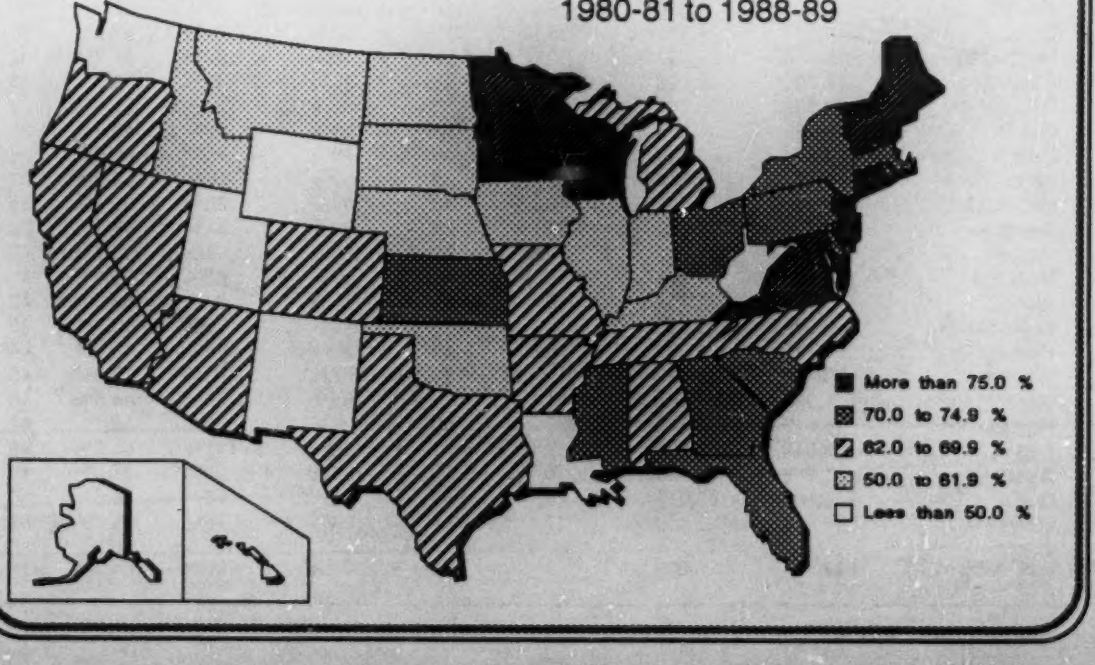


TABLE I–4

AVERAGE SALARY OF TEACHERS IN 1988–89 COMPARED TO ANNUAL EARNINGS IN THE PRIVATE SECTOR, 1988

State	Average Teachers Salary	Private Sector Annual Earnings	Ratio of Teachers To Private Sector	Rank 1989	Rank 1988	Rank 1981
Rhode Island	$34,234	$18,645	1.84	1	1	2
Wisconsin	31,046	18,821	1.65	2	4	10
Hawaii	31,307	19,311	1.62	3	3	1
Oregon	29,385	18,643	1.58	4	6	12
Maryland	33,900	21,533	1.57	5	7	4
Alaska	41,832	26,855	1.56	6	2	23
Minnesota	31,395	20,361	1.54	7	9	13
Montana	24,421	15,886	1.54	8	5	14
Wyoming	27,689	18,080	1.53	9	8	33
California	35,172	23,264	1.51	10	13	6
Connecticut	37,659	24,973	1.51	11	26	39
Iowa	25,884	17,197	1.51	12	12	24
Pennsylvania	31,248	20,772	1.50	13	14	18
Nevada	28,836	19,203	1.50	14	11	16
Arizona	28,499	19,129	1.49	15	17	19
Delaware	31,585	21,233	1.49	16	18	33
Virginia	29,056	19,723	1.47	17	22	27
Washington	29,146	19,800	1.47	18	16	5
Vermont	26,819	18,236	1.47	19	25	45
South Carolina	25,060	17,155	1.46	20	15	29
Nebraska	23,845	16,418	1.45	21	24	25
New York	36,654	25,364	1.45	22	23	8
Michigan	35,530	24,690	1.44	23	10	17
Florida	26,971	18,772	1.44	24	27	22
Colorado	29,557	20,683	1.43	25	21	28
North Carolina	25,650	17,977	1.43	26	19	9
North Dakota	22,249	15,626	1.42	27	28	46
South Dakota	20,525	14,480	1.42	28	29	15
New Mexico	24,554	17,417	1.41	29	20	11
Maine	24,938	17,923	1.39	30	31	26
Kansas	25,992	18,768	1.38	31	36	40
Kentucky	24,920	18,050	1.38	32	32	37
Mississippi	22,579	16,360	1.38	33	44	42
Ohio	29,166	21,150	1.38	34	34	44
Illinois	31,195	22,639	1.38	35	37	20
Tennessee	25,619	18,595	1.38	36	40	30
Massachusetts	32,200	23,639	1.36	37	33	7
Alabama	25,190	18,520	1.36	38	42	32
D.C.	36,787	27,179	1.35	39	35	3
Georgia	26,920	20,019	1.34	40	39	34
New Hampshire	26,703	19,980	1.34	41	48	47
Indiana	27,009	20,224	1.34	42	30	35
New Jersey	32,862	24,655	1.33	43	43	31
Idaho	22,732	17,127	1.33	44	38	36
Arkansas	21,736	16,595	1.31	45	41	41
Missouri	25,981	19,953	1.30	46	45	43
Texas	26,513	20,810	1.27	47	47	49
Utah	23,023	18,192	1.27	48	46	21
Oklahoma	23,400	18,923	1.24	49	49	51
Louisiana	22,469	19,270	1.17	50	51	48
West Virginia	21,904	19,444	1.13	51	50	50
U.S. AVERAGE	$29,629	$21,113	1.40			

TABLE I–5

AVERAGE SALARY OF TEACHERS IN 1988–89 COMPARED TO 1988 PER CAPITA PERSONAL INCOME

State	Average Teacher Salary	Per Capita Personal Income	Ratio of Salary to Per Capita Income			Rank		
			1988–89	1987–88	1980–81	88–89	87–88	80–81
Michigan	$35,530	$16,387	2.17	2.22	2.09	1	2	3
Alaska	41,832	19,514	2.14	2.30	2.10	2	1	2
Mississippi	22,579	10,992	2.05	2.02	1.88	3	9	16
Rhode Island	34,234	16,793	2.04	2.14	2.08	4	3	4
Wyoming	27,689	13,718	2.02	2.13	1.65	5	4	39
Wisconsin	31,046	15,444	2.01	1.99	1.79	6	11	24
Alabama	25,190	12,604	2.00	1.98	1.97	7	13	10
Indiana	29,169	14,721	1.98	1.95	1.87	8	14	18
New Mexico	24,554	12,481	1.97	2.05	2.06	9	6	5
South Carolina	25,060	12,764	1.96	2.06	1.89	10	5	13
Oregon	29,385	14,982	1.96	2.02	1.83	11	8	21
Kentucky	24,920	12,795	1.95	2.03	1.96	12	7	11
Pennsylvania	31,248	16,168	1.93	1.95	1.81	13	16	22
Montana	24,421	12,670	1.93	1.94	1.79	14	17	25
Utah	23,023	12,013	1.92	2.01	2.12	15	10	1
Arizona	28,499	14,887	1.91	1.95	1.88	16	15	17
New York	36,654	19,299	1.90	1.91	1.99	17	18	7
Ohio	29,166	15,485	1.88	1.90	1.74	18	19	33
West Virginia	21,904	11,658	1.88	1.98	1.89	19	12	14
Tennessee	25,619	13,659	1.88	1.87	1.88	20	24	15
California	35,172	18,855	1.87	1.88	1.79	21	23	26
Hawaii	31,307	16,898	1.85	1.85	1.99	22	28	6
Louisiana	22,469	12,193	1.84	1.87	1.91	23	25	12
Minnesota	31,395	16,787	1.83	1.89	1.77	24	20	29
North Carolina	25,650	14,128	1.82	1.89	1.98	25	21	9
Texas	26,513	14,640	1.81	1.86	1.61	26	27	41
Colorado	29,557	16,417	1.80	1.81	1.69	27	34	36
Georgia	26,920	14,980	1.80	1.83	1.85	28	30	20
Idaho	22,732	12,657	1.80	1.88	1.76	29	22	30
Arkansas	21,736	12,172	1.79	1.86	1.78	30	26	27
Delaware	31,585	17,699	1.78	1.82	1.78	31	31	28
Illinois	31,195	17,611	1.77	1.81	1.79	32	33	23
Oklahoma	23,400	13,269	1.76	1.82	1.54	33	32	47
Washington	29,146	16,569	1.76	1.83	1.98	34	29	8
Maryland	33,900	19,314	1.76	1.75	1.76	35	36	32
Iowa	25,884	14,764	1.75	1.75	1.69	36	35	35
North Dakota	22,249	12,720	1.75	1.66	1.62	37	43	40
Vermont	26,819	15,382	1.74	1.74	1.52	38	37	49
D.C.	36,787	21,667	1.70	1.71	1.86	39	39	19
Missouri	25,981	15,492	1.68	1.70	1.66	40	41	38
Maine	24,938	14,976	1.67	1.71	1.70	41	40	34
Connecticut	37,659	22,761	1.65	1.61	1.44	42	46	50
Nevada	28,836	17,440	1.65	1.73	1.55	43	38	46
Virginia	29,056	17,640	1.65	1.67	1.58	44	42	43
South Dakota	20,525	12,475	1.65	1.58	1.66	45	49	37
Kansas	25,992	15,905	1.63	1.65	1.53	46	45	48
Florida	26,937	16,546	1.63	1.65	1.58	47	44	44
Nebraska	26,971	15,184	1.57	1.58	1.60	48	48	42
Massachusetts	32,200	20,701	1.56	1.61	1.76	49	47	31
New Jersey	32,862	21,882	1.50	1.53	1.58	50	50	45
New Hampshire	26,703	19,016	1.40	1.40	1.37	51	51	51
U.S. AVERAGE	$29,629	$16,444	1.80	1.83	1.77			

TABLE I–6

STATE RANKINGS BY 1988–89 AVERAGE TEACHER SALARY ADJUSTED BY THE AFT INTERSTATE COST-OF-LIVING INDEX

State	Average Salary	Cost of Living Index	Adjusted Average Salary	Adjusted Rank	Original Rank
Michigan	$35,530	95.4	$37,247	1	5
Alaska	41,832	123.0	34,010	2	1
California	35,172	105.9	33,220	3	6
Minnesota	31,395	95.6	32,849	4	16
Wisconsin	31,046	95.4	32,530	5	15
New York	36,654	113.2	32,369	6	4
Rhode Island	34,234	106.8	32,067	7	7
Illinois	31,195	97.4	32,038	8	14
Indiana	29,169	92.9	31,396	9	19
Oregon	29,385	94.2	31,186	10	18
Pennsylvania	31,248	101.3	30,835	11	13
Maryland	33,900	110.8	30,609	12	8
Delaware	31,585	103.2	30,595	13	11
Ohio	29,166	95.8	30,441	14	20
Washington	29,146	97.0	30,062	15	21
Connecticut	37,659	125.8	29,947	16	2
Virginia	29,056	97.1	29,930	17	22
Wyoming	27,689	93.4	29,650	18	25
Colorado	29,557	99.8	29,612	19	17
Nevada	28,836	98.1	29,406	20	23
Georgia	26,920	94.1	28,605	21	27
Vermont	26,819	93.9	28,565	22	28
D.C.	36,787	129.8	28,341	23	3
Kansas	25,992	91.7	28,330	24	31
Arizona	28,499	100.8	28,272	25	24
Texas	26,513	94.1	28,168	26	30
Missouri	25,981	92.9	27,974	27	32
Florida	26,937	97.3	27,671	28	26
Iowa	25,884	93.6	27,662	29	33
Tennessee	25,619	93.1	27,530	30	35
Alabama	25,190	91.9	27,420	31	36
North Carolina	25,650	93.6	27,410	32	34
Maine	24,938	92.0	27,116	33	38
South Carolina	25,060	92.6	27,063	34	37
Kentucky	24,920	92.1	27,053	35	39
Montana	24,421	91.1	26,793	36	41
Massachusetts	32,200	121.8	26,430	37	10
New Mexico	24,554	92.9	26,416	38	40
New Jersey	32,862	125.8	26,121	39	9
Nebraska	23,845	92.9	25,659	40	42
Oklahoma	23,400	92.5	25,304	41	43
Mississippi	22,579	90.3	25,000	42	46
Idaho	22,732	91.3	24,903	43	45
Utah	23,023	92.9	24,779	44	44
New Hampshire	26,703	107.9	24,753	45	29
Hawaii	31,307	127.0	24,651	46	12
North Dakota	22,249	92.2	24,138	47	48
Louisiana	22,469	93.4	24,063	48	47
Arkansas	21,736	90.9	23,901	49	50
West Virginia	21,904	91.9	23,831	50	49
South Dakota	20,525	91.6	22,408	51	51
U.S. AVERAGE	$29,614	100.0	$29,614		

Source: AFT Research Department (contact department for technical paper). except Hawaii, Alaska, and Washington D.C. (see data sources appendix to this report)

TABLE I–7

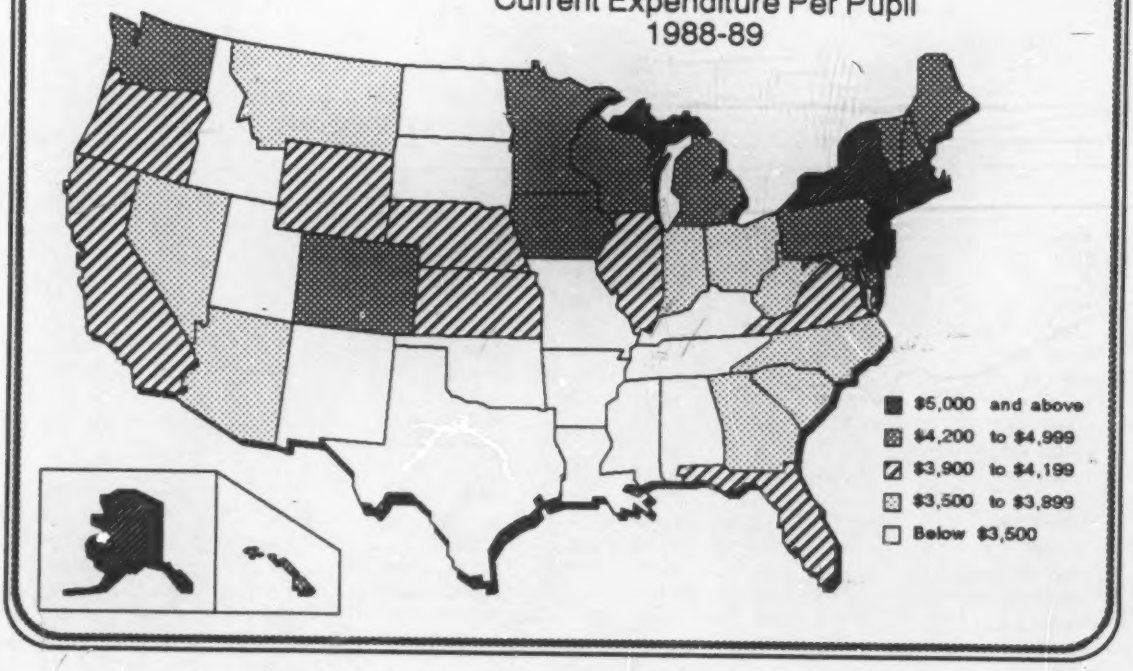
EXPENDITURES PER PUPIL (MEMBERSHIP) IN 1988–89*, AND THE AVERAGE TEACHER SALARY IN 1988–89

	State	Expenditures Per Pupil		Percent of U.S. Average	Average Salary 1988–89	Percent of U.S. Average	Rank
1	Alaska	6,991	b	165%	41,832	141%	1
2	New Jersey	6,737	b	159%	32,862	111%	9
3	Connecticut	6,730		159%	37,659	127%	2
4	New York	6,479	b	153%	36,654	124%	4
5	D.C.	5,781	b	136%	36,787	124%	3
6	Rhode Island	5,292	b	125%	34,234	116%	7
7	Massachusetts	5,263	b	124%	32,200	109%	10
8	Delaware	5,047	a	119%	31,585	107%	11
9	Pennsylvania	4,974	b	117%	31,248	105%	14
10	Maryland	4,953	a	117%	33,900	114%	8
11	Vermont	4,814	a	113%	26,819	91%	28
12	Wyoming	4,814	b	113%	27,689	93%	24
13	Wisconsin	4,663	b	110%	31,046	105%	16
14	Iowa	4,564	b	107%	25,884	87%	33
15	Minnesota	4,411	a	104%	31,395	106%	12
16	Maine	4,386	a	103%	24,938	84%	38
17	New Hampshire	4,364	b	103%	26,703	90%	29
18	Washington	4,339		102%	29,146	98%	20
19	Michigan	4,241		100%	35,530	120%	5
20	Hawaii	4,191	b	99%	31,307	106%	13
21	Oregon	4,172	b	98%	29,385	99%	18
22	Virginia	4,109	b	97%	29,056	98%	21
23	Colorado	4,099	b	97%	29,557	100%	17
24	California	4,091	b	96%	35,172	119%	6
25	Illinois	3,982	b	94%	31,195	105%	15
26	Nebraska	3,962		93%	23,845	80%	42
27	Kansas	3,929	b	93%	25,992	88%	31
28	Florida	3,918	b	92%	26,971	91%	26
29	Ohio	3,869		91%	29,166	98%	19
30	Montana	3,844	b	91%	24,421	82%	41
31	West Virginia	3,835	b	90%	21,904	74%	49
32	Indiana	3,822	b	90%	29,169	98%	25
33	Arizona	3,787	b	89%	28,499	96%	23
34	Nevada	3,786	a	89%	28,836	97%	22
35	Georgia	3,775	a	89%	26,920	91%	27
36	North Carolina	3,596	b	85%	25,650	87%	34
37	South Carolina	3,550	a	84%	25,060	85%	37
38	Texas	3,400	a	80%	26,513	89%	30
39	Missouri	3,395	b	80%	25,981	88%	32
40	New Mexico	3,386	b	80%	24,554	83%	40
41	North Dakota	3,303		78%	22,249	75%	48
42	South Dakota	3,286		77%	20,525	69%	51
43	Tennessee	3,165	b	75%	25,619	86%	35
44	Oklahoma	3,011	b	71%	23,400	79%	43
45	Arkansas	2,887	b	68%	21,736	73%	50
46	Kentucky	2,823	b	66%	24,920	84%	39
47	Louisiana	2,783	b	66%	22,469	76%	47
48	Idaho	2,727	b	64%	22,732	77%	45
49	Mississippi	2,641	b	62%	22,579	76%	46
50	Alabama	2,612	b	62%	25,190	85%	36
51	Utah	2,490	a	59%	23,023	78%	44
	U.S. AVERAGE	$4,246		100%	$29,629	100%	

*Expenditure figures correspond to the federal definition of current expenditures per member. a=preliminary or estimate; b=AFT estimate (based on data supplied by states when available).

Map 3

Current Expenditure Per Pupil 1988-89



Map 4

AFT Interstate Cost-Of-Living Index

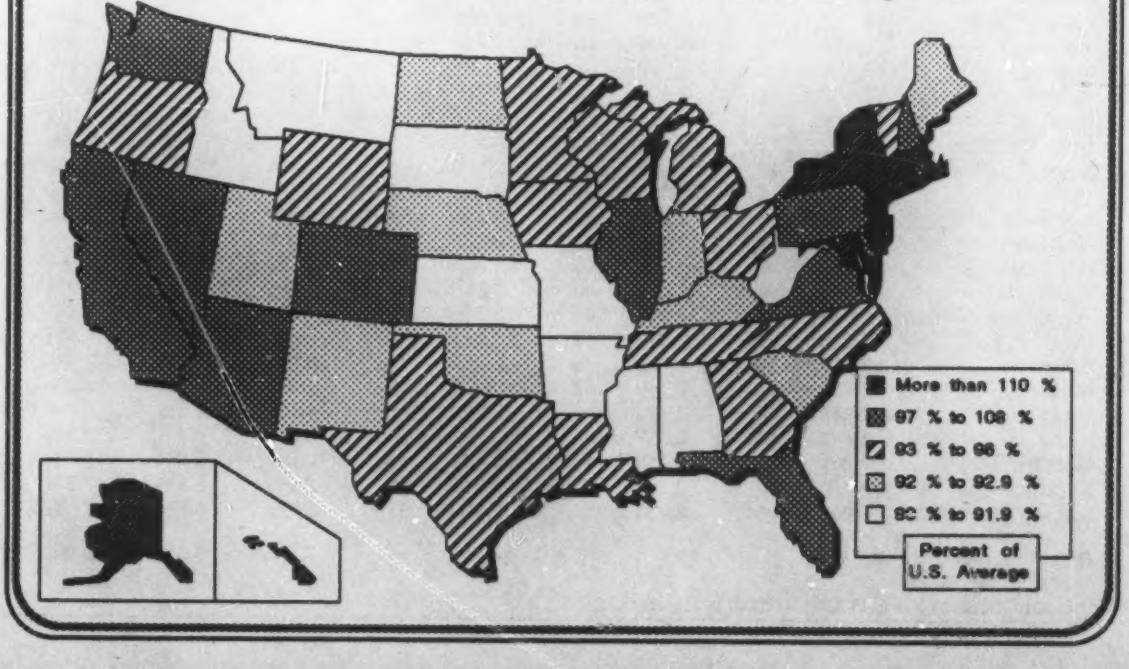


TABLE I–8

TRENDS IN EXPENDITURES PER PUPIL (MEMBERSHIP), 1986–87 TO 1988–89

State	Expenditures Per Pupil* 1986–87	Rank	Expenditures Per Pupil 1987–88	Rank	Expenditures Per Pupil 1988–89	Rank	Percent Change 1986–87 to 1987–88	Percent Change 1987–88 to 1988–89	Percent Change 1986–87 to 1988–89
Alaska	$7,122	1	$6,922	1	$6,991	1	-2.8%	1.0%	-1.8%
New Jersey	5,508	3	6,169	2	6,737	2	12.0%	9.2%	22.3%
Connecticut	5,150	5	5,980	4	6,730	3	16.1%	12.5%	30.7%
New York	5,647	2	6,080	3	6,479	4	7.7%	6.6%	14.7%
D.C.	5,153	4	5,522	5	5,781	5	7.2%	4.7%	12.2%
Rhode Island	4,535	7	4,900	7	5,292	6	8.0%	8.0%	16.7%
Massachusetts	4,490	8	4,919	6	5,263	7	9.6%	7.0%	17.2%
Delaware	4,429	9	4,717	9	5,047	8	6.5%	7.0%	14.0%
Pennsylvania	4,287	10	4,569	11	4,974	9	6.6%	8.9%	16.0%
Maryland	4,211	11	4,651	10	4,953	10	10.4%	6.5%	17.6%
Vermont	4,107	12	4,457	12	4,814	11	8.5%	8.0%	17.2%
Wyoming	4,852	6	4,766	8	4,814	12	-1.8%	1.0%	-0.8%
Wisconsin	4,020	13	4,358	13	4,663	13	8.4%	7.0%	16.0%
Iowa	3,585	23	4,047	16	4,564	14	12.9%	12.8%	27.3%
Minnesota	3,963	14	4,229	14	4,411	15	6.7%	4.3%	11.3%
Maine	3,591	22	3,881	23	4,386	16	8.1%	13.0%	22.1%
New Hampshire	3,603	21	3,905	21	4,364	17	8.4%	11.8%	21.1%
Washington	3,689	20	4,008	18	4,339	18	8.6%	8.3%	17.6%
Michigan	3,822	16	3,964	19	4,241	19	3.7%	7.0%	11.0%
Hawaii	3,503	29	3,892	22	4,191	20	11.1%	7.7%	19.6%
Oregon	3,888	15	4,058	15	4,172	21	4.4%	2.8%	7.3%
Virginia	3,533	27	3,843	24	4,109	22	8.8%	6.9%	16.3%
Colorado	3,814	17	4,024	17	4,099	23	5.5%	1.9%	7.5%
California	3,772	19	3,923	20	4,091	24	4.0%	4.3%	8.5%
Illinois	3,541	26	3,721	29	3,982	25	5.1%	7.0%	12.4%
Nebraska	3,549	25	3,773	26	3,962	26	6.3%	5.0%	11.6%
Kansas	3,573	24	3,742	27	3,929	27	4.7%	5.0%	10.0%
Florida	3,515	28	3,679	30	3,918	28	4.7%	6.5%	11.5%
Ohio	3,408	32	3,651	31	3,863	29	7.1%	6.0%	13.5%
Montana	3,808	18	3,808	25	3,844	30	0.0%	0.9%	0.9%
West Virginia	3,493	30	3,723	28	3,835	31	6.6%	3.0%	9.8%
Indiana	3,213	33	3,506	33	3,822	32	9.1%	9.0%	18.9%
Arizona	3,436	31	3,607	32	3,787	33	5.0%	5.0%	10.2%
Nevada	3,182	34	3,438	34	3,786	34	8.0%	10.1%	19.0%
Georgia	3,148	37	3,436	35	3,775	35	9.1%	9.9%	19.9%
North Carolina	2,942	41	3,392	36	3,596	36	15.3%	6.0%	22.2%
South Carolina	2,988	40	3,046	41	3,550	37	1.9%	16.5%	18.8%
Texas	3,163	35	3,238	39	3,400	38	2.4%	5.0%	7.5%
Missouri	3,142	38	3,356	37	3,395	39	6.8%	1.2%	8.1%
New Mexico	3,071	39	3,256	38	3,386	40	6.0%	4.0%	10.3%
North Dakota	3,159	36	3,159	40	3,303	41	0.0%	4.6%	4.6%
South Dakota	2,935	42	3,026	42	3,286	42	3.1%	8.6%	12.0%
Tennessee	2,649	45	2,941	44	3,165	43	11.0%	7.6%	19.5%
Oklahoma	2,878	43	2,948	43	3,011	44	2.4%	2.1%	4.6%
Arkansas	2,558	46	2,789	45	2,887	45	9.0%	3.5%	12.9%
Kentucky	2,483	47	2,660	47	2,823	46	7.1%	6.1%	13.7%
Louisiana	2,843	44	2,714	46	2,783	47	-4.5%	2.5%	-2.1%
Idaho	2,462	48	2,617	48	2,727	48	6.3%	4.2%	10.8%
Mississippi	2,231	51	2,468	49	2,641	49	10.6%	7.0%	18.4%
Alabama	2,420	49	2,467	50	2,612	50	2.0%	5.9%	7.9%
Utah	2,242	50	2,454	51	2,490	51	9.5%	1.5%	11.1%
U.S. AVERAGE	$3,731		$3,984		$4,246		6.8%	6.6%	13.8%

* Final tabulations of the U.S. Department of Education.

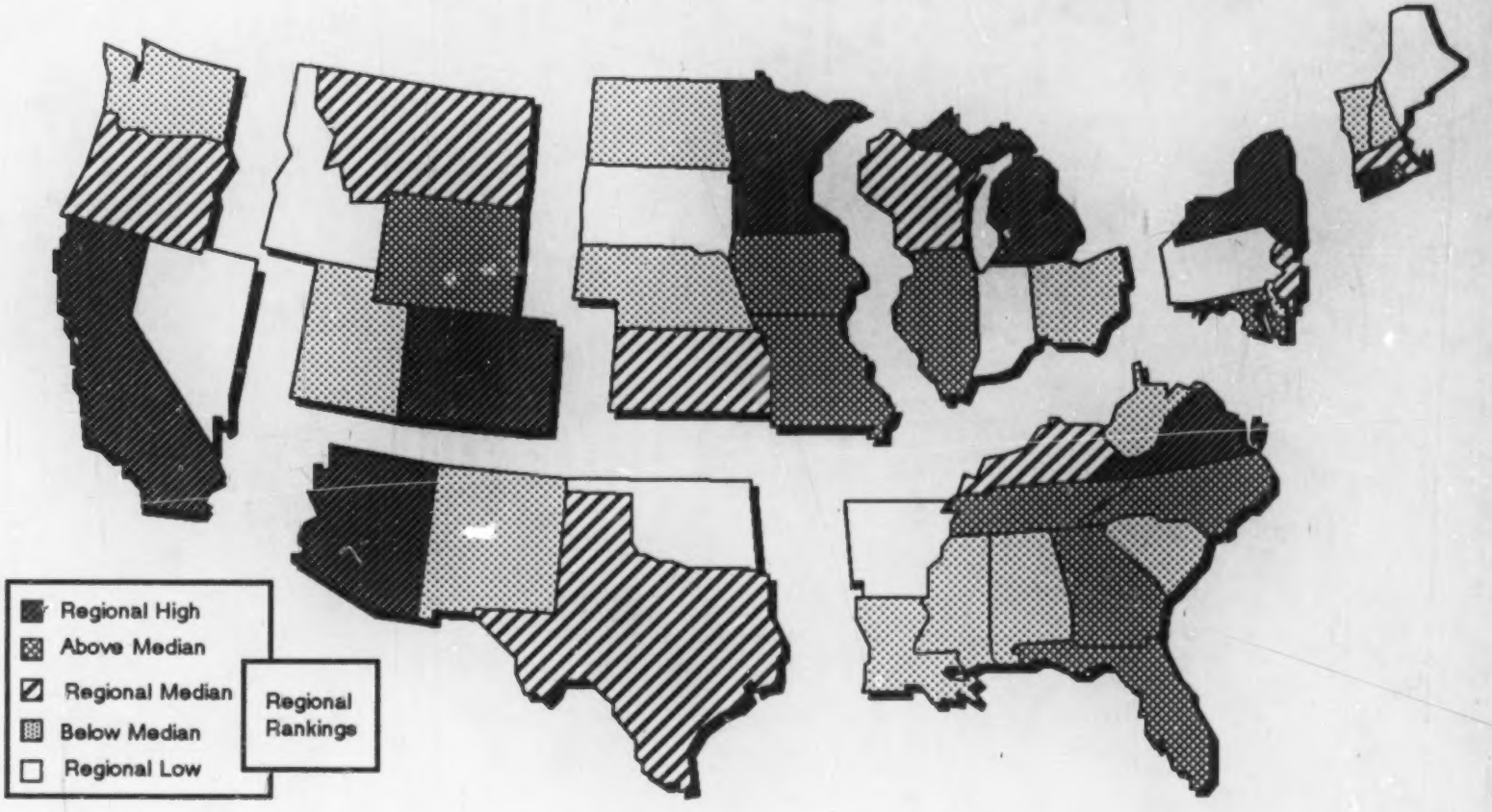
TABLE I–9

EXPENDITURES PER PUPIL AND THE AVERAGE TEACHER SALARY IN 1988–89 RANKED BY AVERAGE SALARY WITHIN REGION

State	Expenditures Per Pupil 1985–86	Average Salary 1986–87
NEW ENGLAND		
Connecticut	$6,730	$37,659
Rhode Island	5,292	34,234
Massachusetts	5,263	32,200
Vermont	4,814	26,819
New Hampshire	4,364	26,703
Maine	4,386	24,938
MIDEAST		
D.C.	5,781	36,787
New York	6,479	36,654
Maryland	4,953	33,900
New Jersey	6,737	32,862
Delaware	5,047	31,585
Pennsylvania	4,974	31,248
GREAT LAKES		
Michigan	4,241	35,530
Illinois	3,982	31,195
Wisconsin	4,663	31,046
Indiana	3,822	29,169
Ohio	3,869	29,166
PLAINS		
Minnesota	4,411	31,395
Kansas	3,929	25,992
Missouri	3,395	25,981
Iowa	4,564	25,884
Nebraska	3,962	23,845
North Dakota	3,303	22,249
South Dakota	3,286	20,525
SOUTHWEST		
Arizona	3,787	28,499
Texas	3,400	26,513
New Mexico	3,386	24,554
Oklahoma	3,011	23,400
SOUTHEAST		
Virginia	4,109	29,056
Florida	3,918	26,971
Georgia	3,775	26,920
North Carolina	3,596	25,650
Tennessee	3,165	25,619
Alabama	2,612	25,190
South Carolina	3,550	25,060
Kentucky	2,823	24,920
Mississippi	2,641	22,579
Louisiana	2,783	22,469
West Virginia	3,835	21,904
Arkansas	2,887	21,736
ROCKY MOUNTAINS		
Colorado	4,099	29,557
Wyoming	4,814	27,689
Montana	3,844	24,421
Utah	2,490	23,023
Idaho	2,727	22,732
FAR WEST		
California	4,091	35,172
Oregon	4,172	29,385
Washington	4,339	29,146
Nevada	3,786	28,836
Alaska	6,991	41,832
Hawaii	4,191	31,307
U.S. AVERAGE	$4,246	$29,629

Map 5

1987-88 Average Teacher Salary, Ranked Within Region



II. Trends in Teacher Salaries Compared to Other Workers and Professions

Trends in Teacher Salaries Compared to Inflation. The purchasing power of teachers, measured in 1989 dollars according to the Consumer Price Index for All Urban Consumers, has risen approximately $6,250 since 1981. Teachers, however, gained just $140 during 1989. As shown in Table II-1 and Figure 2, purchasing power for teachers has been restored to the peak purchasing power period of 1971-73. In 1956, the average teacher salary was $18,589 (in 1989 dollars) -- about two-thirds of the current salary level. During the periods of rapid inflation in the mid-1970s and early 1980s, as shown in Figure II-1, the average teacher salary increase fell below the inflation rate at the onset of inflation but increased as inflation waned. The real wage gains experienced by teachers in the early and mid 80s may be a product of this adjustment lag. The gap between the increase in the average teacher salary increase (5.5%) and the estimated inflation rate (5%) is the smallest since 1981.

In Table II-1 and the following tables, the 1989 inflation rate is estimated at 5.0 percent. (Blue Chip Economic Indicators, May 10, 1989). Inflation may well turn out higher. The rate stands at 5.4 percent for the 12 months ending April 1988. A 7.1 percent annualized rate has been posted for the 3 months ending May 1988. Teachers may experience little, if any, gain in real earnings during 1988.

Trends in Teacher Salaries Compared to the Average Annual Earnings of All Workers. The ratio of teacher salaries to the mean average annual earnings of the full-time, nonagricultural worker was 1.18 in 1988 as shown in Table II-1. This ratio is at its highest level ever during the past 22 years. The ratio has been as low as 1.00 in 1957 and as high as 1.14 in 1971 but fell to 1.01 as recently as 1981. Figure 2 illustrates these trends.

The teacher to average worker salary ratio is an index, and the average worker's salary should not be interpreted as a target for teacher salaries. Some economic forces -- such as inflation and economic growth or stagnation -- affect all workers in the economy. Consequently, merely adjusting for inflation does not adequately describe the financial well-being of teachers. Had teacher purchasing power remained the same since 1956, teachers would be earning approximately $6,500 less than the average worker in 1988. Furthermore, as the productivity of the economy increases and the value of all labor rises, teachers should share equally in economy-wide gains in productivity, roughly measured by the real increase in the annual earnings of the average full-time worker.

Trends in Teacher Salaries Compared to the Average Annual Salaries of All Government Workers. Trends in government worker salaries have closely matched trends in teachers salaries. Teachers outpaced government workers over the 1960s,

with the ratio of teacher salaries to government worker salaries rising to 1.11 in 1968. During the 1970s, however, government workers fared much better than teachers and the ratio fell to 1.00 by 1982. In 1988, teachers had a 12 percent advantage over all government workers, up slightly from the year before.

Trends in Teacher Salaries Adjusted for Work Experience. Though teacher salaries are at the highest levels ever, the average teacher in 1988 had 16 years of experience, more experience than at any time over the past three decades. Clearly, the rapid rise in teacher salaries over the early 1980s was due primarily to layoffs of low-paid teachers and minimal hiring of beginning teachers. This effect has abated over the past 3 or 4 years as the growth in teacher experience has leveled off due to the reduction in layoffs and an increase in hiring. The educational attainment of teachers has increased at a rate commensurate with their experience. In 1975, less than 40 percent of teachers held a masters degree. In 1985, the comparable figure was over 50 percent.

With an estimated 15.6 years of experience, the average teacher earned $28,629 in 1989. During 1972, the average teacher earned $28,892 (in 1989 dollars), but had only 10.7 years of experience. If a year of experience yields about 3.0 percent more on the salary schedule, a teacher with 15.6 years of experience in 1972 earned approximately $33,139 (in 1989 dollars) -- $2,500 more than teachers with 15.6 years of experience in 1989. Adjustments for other years are graphed in Figure 4. The 3.0 percent adjustment for a year of experience is conservative. In the school districts serving the nation's 100 largest cities in 1988, the average salary increase in moving from the BA beginning salary to the MA maximum salary (reached in an average of 15 years) was $1,003 or 3.1% of the average MA maximum salary of $32,623. Clearly, continued teacher dissatisfaction with their salaries seems legitimate from this perspective.

Trends in Teacher Salaries Compared to the Annual Earnings of Male and Female Workers. The work force has changed substantially over the past 30 years. Since 1961, both the average worker and average teacher have gained about one year of education, but the typical teacher still has four more years of education than the average worker. The influx of female workers in the labor force might make comparisons to the average worker problematic. The entry of many low-paid female workers could invalidate the use of the teacher/average worker salary ratio as an index by which to evaluate trends in teacher salaries. On the other hand, the comparison to female workers over time helps index the relative attractiveness of the female-dominated teaching occupation. Table II-2 contains separate comparisons of the average teacher salary to full-time male and full-time female workers.

Male workers in the U.S. economy enjoyed an approximately 20 percent advantage over teachers during the 1960s, as shown in Table III-3 and graphed in Figure 5. The advantage grew to 34 percent by 1981 as the salaries of teachers deteriorated, but fell to only a 11 percent advantage in 1988 -- the lowest ratio in any period during the

past 30 years. The earnings of the average full-time, year-round female worker also gained slowly on teacher salaries until 1982, rising from 64 percent of the average teacher salary in 1968 to 80 percent by 1982. By 1988, however, full-time women workers earned just 71 percent as much as the average teacher.

Average Teacher Salaries Compared to Selected White-Collar Occupations. The relationship of salaries in other white-collar occupations to each other changed little over the past 25 years, as shown in Table II-3 and illustrated in Figure II-6. For the fifth consecutive year, the average teacher salary grew faster or at the same rate as salaries in four other white-collar occupations (4th panel of Table II-3). The lawyers' average salary grew at a 6.2 percent rate. The job categories described in the tables and figure, such as Accountant "III" or Chemist "IV", contain the accountant or chemist who had earnings in the middle of the income distribution for all accountants or chemists. The figures in Table II-3 are the average of all people in that job category, such as Accountant III or Chemist IV. Lawyers earned about double the average teacher salary, chemists and engineers about 65 percent more and auditors and accountants about 18 to 25 percent more. Salaries in other white-collar occupations deteriorated relative to teacher salaries through the mid-1970s. Other white-collar occupations gained sharply on teachers from the mid-1970s until 1982, but in just the past five years, most of this gain has been erased. In 1962, teachers earned less relative to all of the occupations listed in the tables compared to 1989.

Teacher Salaries Compared to Academic Salaries. Academic salaries have not maintained the same consistent relationship with teacher salaries that private sector white-collar occupations have kept. The salary advantage of assistant professors over teachers had declined continuously since 1963, and in 1988, the advantage slipped to one percent (third panel of Table II-3). Salaries of assistant professors reported to the AUUP in 1988-89, however, rebounded sharply and increased by nearly 9 percent. Assistant professors now average a 5 percent higher salary than elementary and secondary teachers. While full professors still have an 80 percent advantage, this figure has fallen continuously from a 120 percent advantage in 1967. During the 1960s, full professors enjoyed higher real earnings than did attorneys. For 1985, 1986 and 1987 academics experienced salary gains on par with teachers. In 1988, academic salaries improved at a slower rate than teacher salaries; but in 1989, they rose at a 6.2 percent rate, slightly above teacher salary growth.

Projected Wage Increases For 1989-90. An analysis of about 25 teacher salary adjustments or wage agreements covering 1,000 or more workers for 1989-90 indicated that teacher salaries will rise at least as much next year as in 1988-89. The average increase reported prior to September 1988 for 18 agreements covering 1989-90 is 7.3 percent, while the average increase in 25 settlements reported between August 1988 and April 1988 for 1989-90 is 6.2 percent. Based on the same projections methodology applied to 70 wage agreements, a 5.6 percent wage increase was predicted for 1988-89. The actual national average was 5.5 percent. Figure II-8 graphs these data against

past projections using this data source and the national average salary based on data collected from state departments of education.

Salaries of Nonteaching Personnel. The average teacher salary increase of 157% since 1975-76 has been more than the increase in any category of nonteaching personnel shown in Table II-4, except central office secretaries. Superintendents (up 134 percent) and high school principals (up 131 percent) have lost ground to teachers. Though no data on age exist, the closing of the teacher-administrator salary gap probably reflects the rapid increase in teacher experience over the decade illustrated in Figures II-3 and II-4. Beginning teacher salaries, for example, rose only 127 percent, the smallest increase of any category of personnel.

Figure II-1

Annual Rate of Increase in Teacher Salaries Compared to the Consumer Price Index

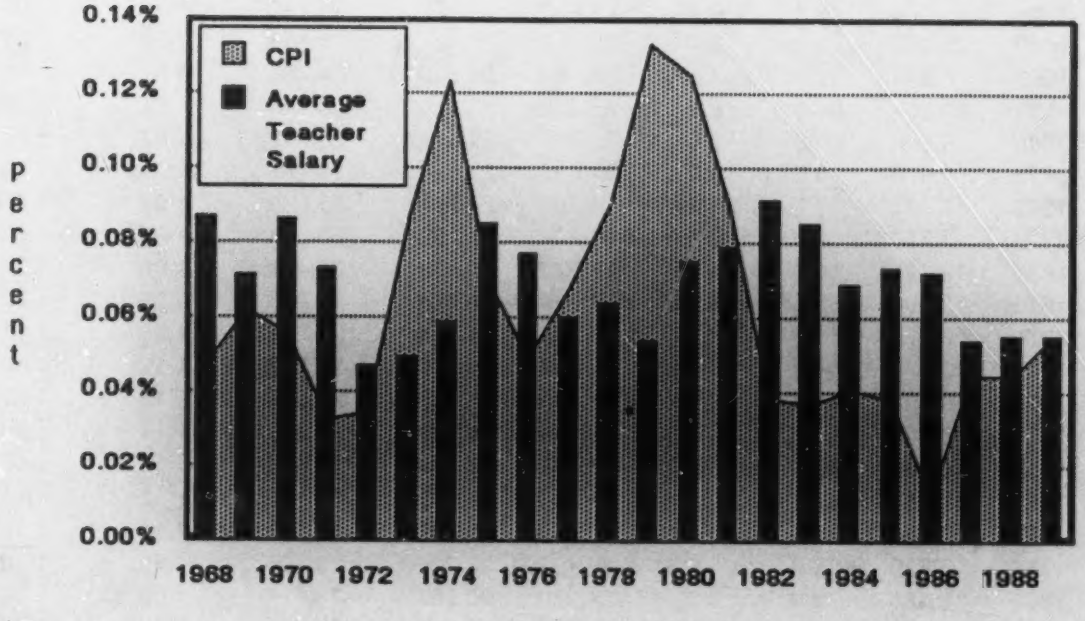


TABLE II–1

TRENDS IN TEACHER SALARIES COMPARED TO THE AVERAGE ANNUAL EARNINGS OF ALL WORKERS AND OF ALL GOVERNMENT WORKERS

	Mean Teacher Salary	CPI	CPI Change	Mean Annual Earnings (1989 Dollars)			Ratio of Teacher Salary to Salary of:	
				Teachers	All Workers	Government Workers	All Workers	Government Workers
1989	$29,629	126.5 *	5.0%*	$29,629				
1988	28,071	120.5	4.4%	29,475	$25,081 *	$26,436 *	1.18	1.11
1987	26,615	115.4	4.4%	29,181	25,110	26,340	1.16	1.11
1986	25,260	110.5	1.1%	28,923	25,117	26,605	1.15	1.09
1985	23,572	109.3	3.8%	27,287	24,272	25,632	1.12	1.06
1984	21,974	105.3	4.1%	26,403	24,177	25,182	1.09	1.05
1983	20,547	101.2	3.7%	25,689	24,134	24,853	1.06	1.03
1982	18,945	97.6	3.8%	24,560	23,940	24,484	1.03	1.00
1981	17,364	94.0	8.9%	23,372	23,156	23,480	1.01	1.00
1980	16,100	86.3	12.5%	23,604	23,116	23,342	1.02	1.01
1979	14,970	76.7	13.3%	24,695	23,627	24,167	1.05	1.02
1978	14,207	67.7	9.0%	26,552	24,776	25,683	1.07	1.03
1977	13,352	62.1	6.7%	27,204	25,193	26,304	1.08	1.03
1976	12,591	58.2	4.9%	27,372	25,233	26,423	1.08	1.04
1975	11,690	55.5	6.9%	26,650	24,675	26,076	1.08	1.02
1974	10,778	51.9	12.3%	26,275	24,324	25,905	1.08	1.01
1973	10,176	46.2	8.7%	27,868	24,910	27,262	1.12	1.02
1972	9,705	42.5	3.4%	28,892	25,603	28,036	1.13	1.03
1971	9,269	41.1	3.3%	28,534	24,932	26,408	1.14	1.08
1970	8,635	39.8	5.6%	27,451	24,019	25,438	1.14	1.08
1969	7,952	37.7	6.2%	26,688	23,785	24,100	1.12	1.11
1968	7,423	35.5	4.7%	26,456	23,699	23,913	1.12	1.11
1967	6,830	33.9	3.0%	25,492	23,226	23,196	1.10	1.10
1966	6,485	32.9	3.5%	24,940	22,922	22,810	1.09	1.09
1965	6,195	31.8	1.9%	24,649	22,693	22,721	1.09	1.08
1964	5,995	31.2	1.0%	24,311	22,291	22,230	1.09	1.09
1963	5,732	30.9	1.6%	23,471	21,444	21,289	1.09	1.10
1962	5,515	30.4	1.3%	22,953	21,057	20,757	1.09	1.11
1961	5,275	30.0	0.7%	22,247	20,575	20,470	1.08	1.09
1960	4,995	29.8	1.4%	21,208	20,115	19,831	1.05	1.07
1959	4,797	29.4	1.7%	20,644	19,748	19,340	1.05	1.07
1958	4,571	28.9	1.8%	20,012	19,132	18,927	1.05	1.06
1957	4,239	28.4	2.9%	18,885	18,824	18,001	1.00	1.05
1956	4,055	27.6		18,589	18,568	17,533	1.00	1.06

* Estimated

Figure II-2

Trends in Annual Earnings of Teachers, Government Workers, and All Workers

(Mean Annual Earnings in 1988 Dollars)

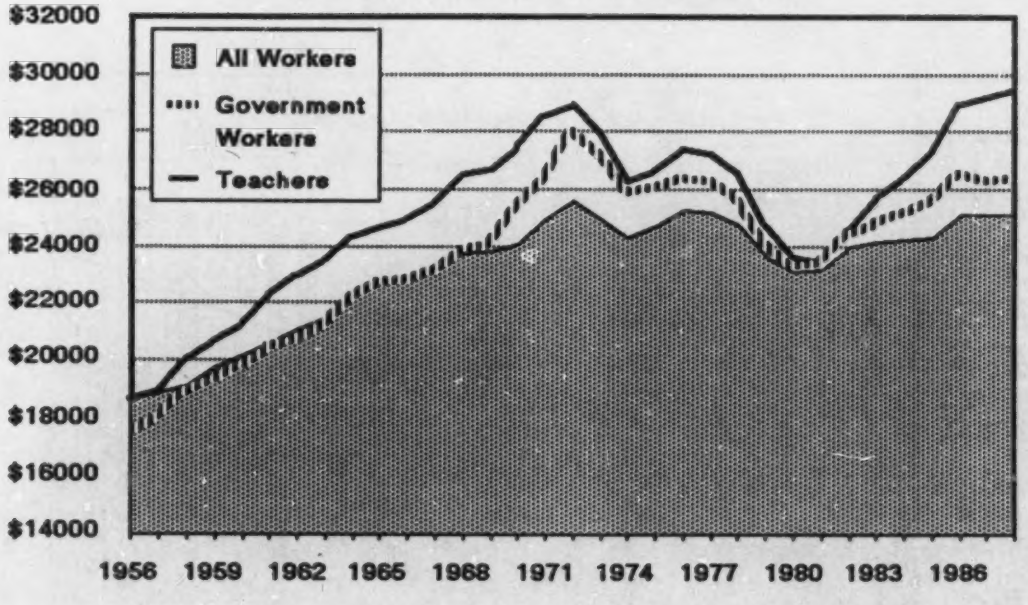


Figure II-3

The Average Teacher Salary Compared to the Average Experience Level of Teachers

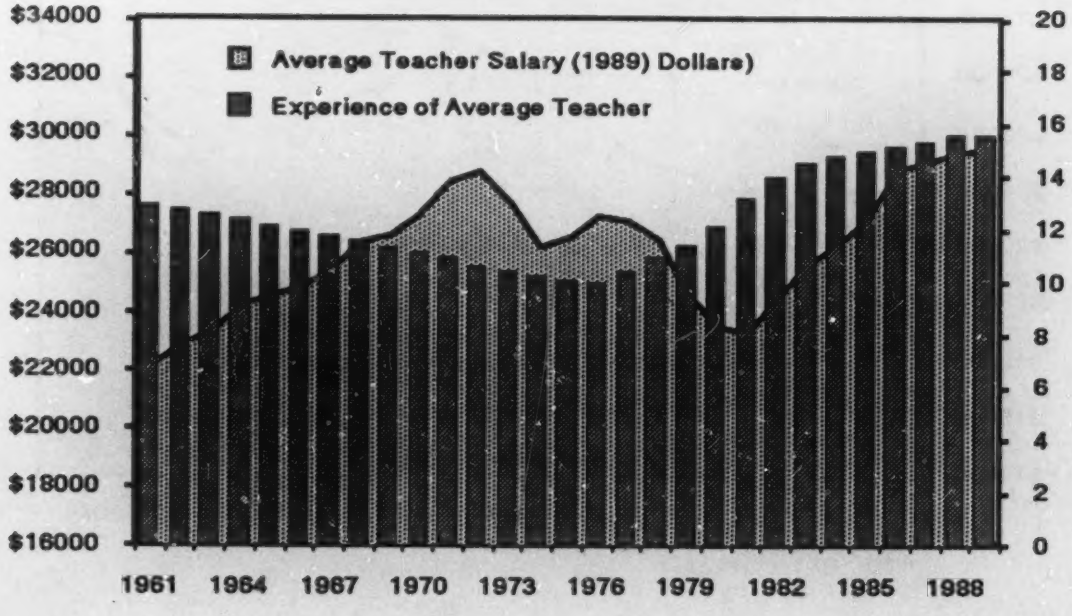


Figure II-4

Trends in Annual Earnings of Teachers, Controlling For Work Experience

(Mean Annual Earnings in 1989 Dollars)

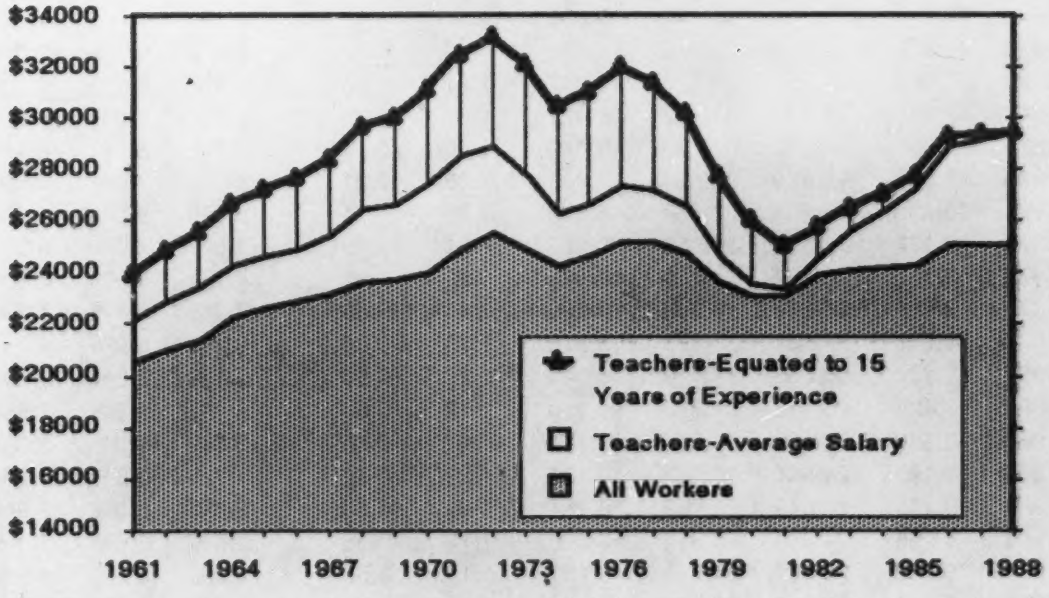


TABLE II–2

TRENDS IN TEACHER SALARIES COMPARED TO THE AVERAGE ANNUAL MONEY INCOME OF MALE AND FEMALE INDIVIDUALS WORKING FULL–TIME

	Mean Teacher Salary	Mean Annual Money Income (1989 Dollars)			Proportion of Teacher Salary Earned by:		Annual Percent Increase in Nominal Dollars		
		Teachers	Men	Women	Men	Women	Teachers	Men	Women
1989	$29,629	$29,629					5.6%		
1988	28,071	29,475	32,759	20,925	1.11	0.71	5.5%	2.9%	2.9%
1987	26,615	29,181	33,243	21,234	1.14	0.73	5.4%	3.2%	3.9%
1986	25,260	28,923	33,641	21,343	1.16	0.74	7.2%	3.6%	3.6%
1985	23,572	27,287	32,835	20,820	1.20	0.76	7.3%	4.1%	5.4%
1984	21,974	26,403	32,728	20,508	1.24	0.78	6.9%	5.5%	6.3%
1983	20,547	25,689	32,265	20,074	1.26	0.78	8.5%	4.0%	6.0%
1982	18,945	24,560	32,161	19,630	1.31	0.80	9.1%	6.8%	9.2%
1981	17,364	23,372	31,253	18,669	1.34	0.80	7.9%	8.3%	8.9%
1980	16,100	23,604	31,427	18,665	1.33	0.79	7.5%	7.4%	11.2%
1979	14,970	24,695	32,915	18,885	1.33	0.76	5.4%	9.0%	10.0%
1978	14,207	26,552	34,210	19,442	1.29	0.73	6.4%	8.1%	9.1%
1977	13,352	27,204	34,492	19,427	1.27	0.71	6.0%	7.8%	6.5%
1976	12,591	27,372	34,133	19,470	1.25	0.71	7.7%	6.7%	8.4%
1975	11,690	26,650	33,544	18,835	1.26	0.71	8.5%	7.0%	7.5%
1974	10,778	26,275	33,538	18,733	1.28	0.71	5.9%	9.0%	11.2%
1973	10,176	27,868	34,556	18,927	1.24	0.68	4.9%	7.0%	5.9%
1972	9,705	28,892	35,120	19,428	1.22	0.67	4.7%	8.9%	6.8%
1971	9,269	28,534	33,352	18,806	1.17	0.66	7.3%	5.1%	4.3%
1970	8,635	27,451	32,782	18,616	1.19	0.68	8.6%	5.9%	8.3%
1969	7,952	26,688	32,678	18,140	1.22	0.68	7.1%	10.9%	13.5%
1968	7,423	26,456	31,303	16,979	1.18	0.64	8.7%	9.5%	7.9%
1967	6,830	25,492	29,944	16,474	1.17	0.65	5.3%	1.0%	3.3%
1966	6,485	24,940	30,558	16,433	1.23	0.66	4.7%	5.8%	5.2%
1965	6,195	24,649	29,889	16,154	1.21	0.66	3.3%	6.5%	2.9%
1964	5,995	24,311	28,614	16,006	1.18	0.66	4.6%	3.6%	4.4%
1963	5,732	23,471	27,889	15,482	1.19	0.66	3.9%	3.6%	4.9%
1962	5,515	22,953	27,374	14,996	1.19	0.65	4.5%	1.4%	1.7%
1961	5,275	22,247	27,355	14,947	1.23	0.67	5.6%	5.7%	4.3%
1960	4,995	21,208	26,052	14,423	1.23	0.68	4.1%	5.4%	2.1%
1959	4,797	20,644	25,064	14,314	1.21	0.69	4.9%	5.8%	4.2%
1958	4,571	20,012	24,105	13,975	1.20	0.70	7.8%	5.0%	5.5%
1957	4,239	18,885	23,367	13,481	1.24	0.71	4.5%	4.2%	4.3%
1956	4,055	18,589	23,068	13,303	1.24	0.72			

*Estimated

Figure II-5

Ratio of Annual Money Income of Male and Female Full-Time Workers to the Average Teacher Salary

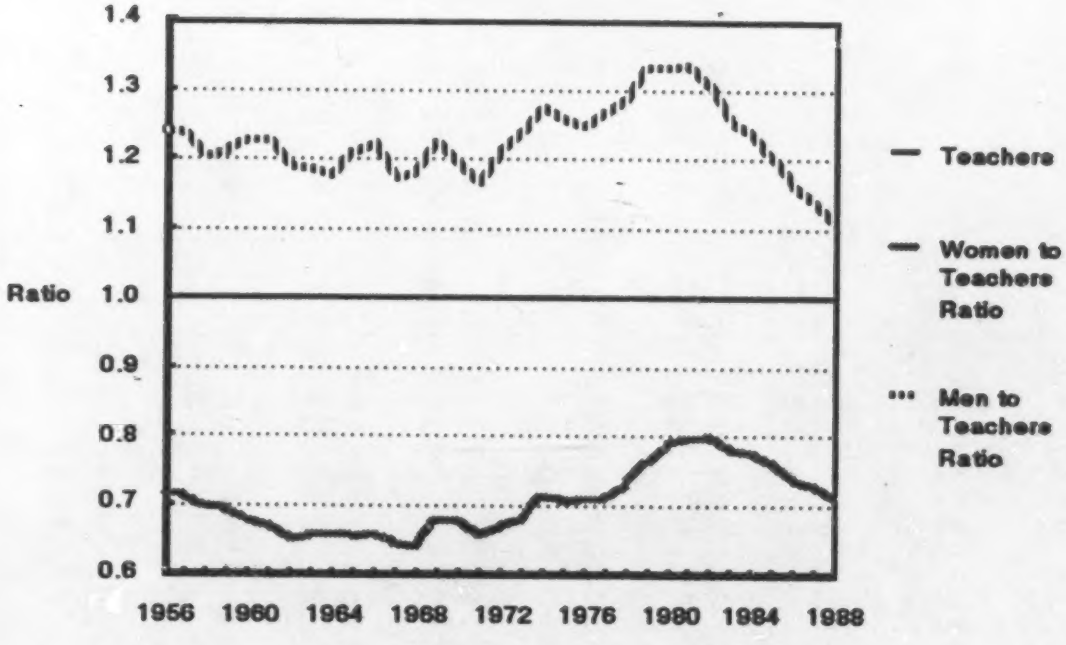


TABLE II–3

TRENDS IN TEACHER SALARIES COMPARED TO THE AVERAGE ANNUAL SALARIES OF SELECTED WHITE–COLLAR OCCUPATIONS

	Mean Teacher Salary	Account-ant I	Auditor III	Attorney III	Chemist IV	Engineer IV	Full Prof. Public Doctoral	Assistant Prof. Public Com-prehensive
1989	$29,629						$54,240	$30,900
1988 *	28,071	$33,028	$34,765	$55,407	$45,760	$45,680	51,080	28,380
1987 *	26,615	32,074	33,302	52,158	43,480	44,360	48,740	27,520
1986 *	25,260	31,143	32,121	50,119	41,548	42,667	45,600	26,000
1985	23,572	30,037	31,246	47,742	39,418	40,991	42,600	24,400
1984	21,974	28,721	30,209	44,743	37,643	39,005	39,800	23,000
1983	20,547	27,346	28,245	42,271	35,439	36,726	38,200	22,000
1982	18,945	25,673	26,502	39,649	34,047	34,443	35,700	20,800
1981	17,364	23,545	24,401	36,373	30,801	31,352	32,900	19,300
1980	16,100	21,299	22,026	33,034	27,681	28,486	30,100	17,800
1979	14,970	19,468	20,303	29,644	25,459	25,989	28,200	16,600
1978	14,207	18,115	18,756	27,738	23,532	23,972	26,400	15,900
1977	13,352	16,545	17,108	25,460	21,674	22,072	25,200	15,700
1976	12,591	15,428	16,059	24,205	20,429	20,749	24,200	14,600
1975	11,690	14,458	15,334	22,558	19,204	19,443	22,700	13,900
1974	10,778	13,285	14,341	21,082	17,283	17,929	21,600	13,100
1973	10,176	12,472	13,568	19,565	16,140	17,030	20,500	12,500
1972	9,705	11,879	12,881	18,392	15,670	16,159	19,800	11,800
1971	9,269	11,383	12,227	17,509	15,036	15,535	19,200	11,400
1970	8,635	10,686	11,475	16,884	14,218	14,695	18,100	10,800
1969	7,952	10,029	10,726	15,879	13,359	13,893	17,100	10,100
1968	7,423	9,367	9,977	15,283	12,751	13,095	16,100	9,500
1967	6,830	8,879	9,449	14,419	12,044	12,424	15,000	8,600
1966	6,485	8,328	8,904	14,052	11,448	11,784	14,100	8,300
1965	6,195	8,124	8,748	13,644	10,980	11,376	13,200	7,900
1964	5,995	7,908	8,520	12,816	10,632	11,016	12,500	7,700
1963	5,732	7,668	8,244	12,300	10,248	10,728	11,800	7,500
1962	5,515	7,416	7,932	11,844	9,936	10,248	na	na
				(1989 DOLLARS)				
1989	$29,629						$54,240	$30,900
1988 *	29,475	$34,679	$36,503	$58,177	$48,048	$47,964	53,634	29,799
1987 *	29,181	35,166	36,512	57,186	47,672	48,636	53,439	30,173
1986 *	28,923	35,659	36,779	57,387	47,573	48,855	52,213	29,771
1985	27,287	34,771	36,170	55,266	45,630	47,451	49,313	28,245
1984	26,403	34,510	36,298	53,762	45,231	46,867	47,822	27,636
1983	25,689	34,189	35,313	52,849	44,308	45,917	47,759	27,505
1982	24,560	33,282	34,356	51,399	44,137	44,651	46,280	26,964
1981	23,372	31,692	32,844	48,958	41,458	42,200	44,284	25,978
1980	23,604	31,227	32,292	48,431	40,583	41,764	44,130	26,097
1979	24,695	32,115	33,492	48,901	41,997	42,872	46,519	27,384
1978	26,552	33,855	35,053	51,840	43,979	44,801	49,339	29,716
1977	27,204	33,709	34,857	51,873	44,159	44,970	51,343	31,988
1976	27,372	33,540	34,912	52,621	44,412	45,108	52,610	31,740
1975	26,650	32,960	34,957	51,426	43,780	44,325	51,750	31,688
1974	26,275	32,387	34,961	51,395	42,134	43,708	52,658	31,936
1973	27,868	34,156	37,158	53,581	44,202	46,639	56,142	34,233
1972	28,892	35,364	38,347	54,754	46,651	48,106	58,946	35,129
1971	28,534	35,042	37,640	53,901	46,288	47,824	59,107	35,095
1970	27,451	33,971	36,479	53,675	45,199	46,716	57,540	34,333
1969	26,688	33,658	35,998	53,292	44,834	46,626	57,389	33,897
1968	26,456	33,385	35,559	54,470	45,446	46,672	57,382	33,859
1967	25,492	33,139	35,267	53,816	44,952	46,370	55,986	32,098
1966	24,940	32,027	34,243	54,040	44,026	45,318	54,225	31,920
1965	24,649	32,324	34,806	54,286	43,687	45,263	52,520	31,432
1964	24,311	32,069	34,551	51,973	43,116	44,673	50,691	31,226
1963	23,471	31,398	33,756	50,364	41,962	43,928	48,317	30,710
1962	22,953	30,865	33,013	49,295	41,354	42,652		

* See note on next page.

(TABLE II-3 Continued)

RATIO OF SALARIES IN OTHER OCCUPATIONS TO TEACHER SALARIES

	Teachers	Account-ant III	Auditor III	Attorney III	Chemist IV	Engineer IV	Full Prof. Public Doctoral	Assistant Prof. Public Com-prehensive
1989	1.00						1.83	1.04
1988 *	1.00	1.18	1.24	1.97	1.63	1.63	1.82	1.01
1987 *	1.00	1.21	1.25	1.96	1.63	1.67	1.83	1.03
1986 *	1.00	1.23	1.27	1.98	1.64	1.69	1.81	1.03
1985	1.00	1.27	1.33	2.03	1.67	1.74	1.81	1.04
1984	1.00	1.31	1.37	2.04	1.71	1.78	1.81	1.05
1983	1.00	1.33	1.37	2.06	1.72	1.79	1.86	1.07
1982	1.00	1.36	1.40	2.09	1.80	1.82	1.88	1.10
1981	1.00	1.36	1.41	2.09	1.77	1.81	1.89	1.11
1980	1.00	1.32	1.37	2.05	1.72	1.77	1.87	1.11
1979	1.00	1.30	1.36	1.98	1.70	1.74	1.88	1.11
1978	1.00	1.28	1.32	1.95	1.66	1.69	1.86	1.12
1977	1.00	1.24	1.28	1.91	1.62	1.65	1.89	1.18
1976	1.00	1.23	1.28	1.92	1.62	1.65	1.92	1.16
1975	1.00	1.24	1.31	1.93	1.64	1.66	1.94	1.19
1974	1.00	1.23	1.33	1.96	1.60	1.66	2.00	1.22
1973	1.00	1.23	1.33	1.92	1.59	1.67	2.01	1.23
1972	1.00	1.22	1.33	1.90	1.61	1.67	2.04	1.22
1971	1.00	1.23	1.32	1.89	1.62	1.68	2.07	1.23
1970	1.00	1.24	1.33	1.96	1.65	1.70	2.10	1.25
1969	1.00	1.26	1.35	2.00	1.68	1.75	2.15	1.27
1968	1.00	1.26	1.34	2.06	1.72	1.76	2.17	1.28
1967	1.00	1.30	1.38	2.11	1.76	1.82	2.20	1.26
1966	1.00	1.28	1.37	2.17	1.77	1.82	2.17	1.28
1965	1.00	1.31	1.41	2.20	1.77	1.84	2.13	1.28
1964	1.00	1.32	1.42	2.14	1.77	1.84	2.09	1.28
1963	1.00	1.34	1.44	2.15	1.79	1.87	2.06	1.31
1962	1.00	1.34	1.44	2.15	1.80	1.86	na	na
ANNUAL PERCENT INCREASE								
1989	5.6%						6.2%	8.9%
1988 *	5.5%	3.0%	4.4%	6.2%	5.2%	3.0%	4.8%	3.1%
1987 *	5.4%	3.0%	3.7%	4.1%	4.7%	4.0%	6.9%	5.8%
1986 *	7.2%	3.7%	2.8%	5.0%	5.4%	4.1%	7.0%	6.6%
1985	7.3%	4.6%	3.4%	6.7%	4.7%	5.1%	7.0%	6.1%
1984	6.9%	5.0%	7.0%	5.8%	6.2%	6.2%	4.2%	4.5%
1983	8.5%	6.5%	6.6%	6.6%	4.1%	6.6%	7.0%	5.8%
1982	9.1%	9.0%	8.6%	9.0%	10.5%	9.9%	8.5%	7.8%
1981	7.9%	10.5%	10.8%	10.1%	11.3%	10.1%	9.3%	8.4%
1980	7.5%	9.4%	8.5%	11.4%	8.7%	9.6%	6.7%	7.2%
1979	5.4%	7.5%	8.2%	6.9%	8.2%	8.4%	6.8%	4.4%
1978	6.4%	9.5%	9.6%	8.9%	8.6%	8.6%	4.8%	1.3%
1977	6.0%	7.2%	6.5%	5.2%	6.1%	6.4%	4.1%	7.5%
1976	7.7%	6.7%	4.7%	7.3%	6.4%	6.7%	6.6%	5.0%
1975	8.5%	8.8%	6.9%	7.0%	11.1%	8.4%	5.1%	6.1%
1974	5.9%	6.5%	5.7%	7.8%	7.1%	5.3%	5.4%	4.8%
1973	4.9%	5.0%	5.3%	6.4%	3.0%	5.4%	3.5%	5.9%
1972	4.7%	4.4%	5.3%	5.0%	4.2%	4.0%	3.1%	3.5%
1971	7.3%	6.5%	6.6%	3.7%	5.8%	5.7%	6.1%	5.6%
1970	8.6%	6.6%	7.0%	6.3%	6.4%	5.8%	5.8%	6.9%
1969	7.1%	7.1%	7.5%	3.9%	4.8%	6.1%	6.2%	6.3%
1968	8.7%	5.5%	5.6%	6.0%	5.9%	5.4%	7.3%	10.5%
1967	5.3%	6.6%	6.1%	2.6%	5.2%	5.4%	6.4%	3.6%
1966	4.7%	2.5%	1.8%	3.0%	4.3%	3.6%	6.8%	5.1%
1965	3.3%	2.7%	2.7%	6.5%	3.3%	3.3%	5.6%	2.6%
1964	4.6%	3.1%	3.3%	4.2%	3.7%	2.7%	5.9%	2.7%
1963	3.9%	3.4%	3.9%	3.9%	3.1%	4.7%	na	na
1962	4.5%	3.0%	2.6%	2.1%	0.8%	4.5%	na	na

* The Professional, Technical, Administrative and Clerical survey is not exactly comparable in 1986,1987 and 1988. Prior to 1986 the survey included firms with at least 100 employees. In 1986 the minimum fell to 50, in 1987 the minimum was 20, and in 1988 the minimum sized established was restored to 50. Smaller firms tend to pay less.

Figure II-6

Trends in the Average Salary in Teaching and in Selected White-Collar Occupations

(1989 Dollars)

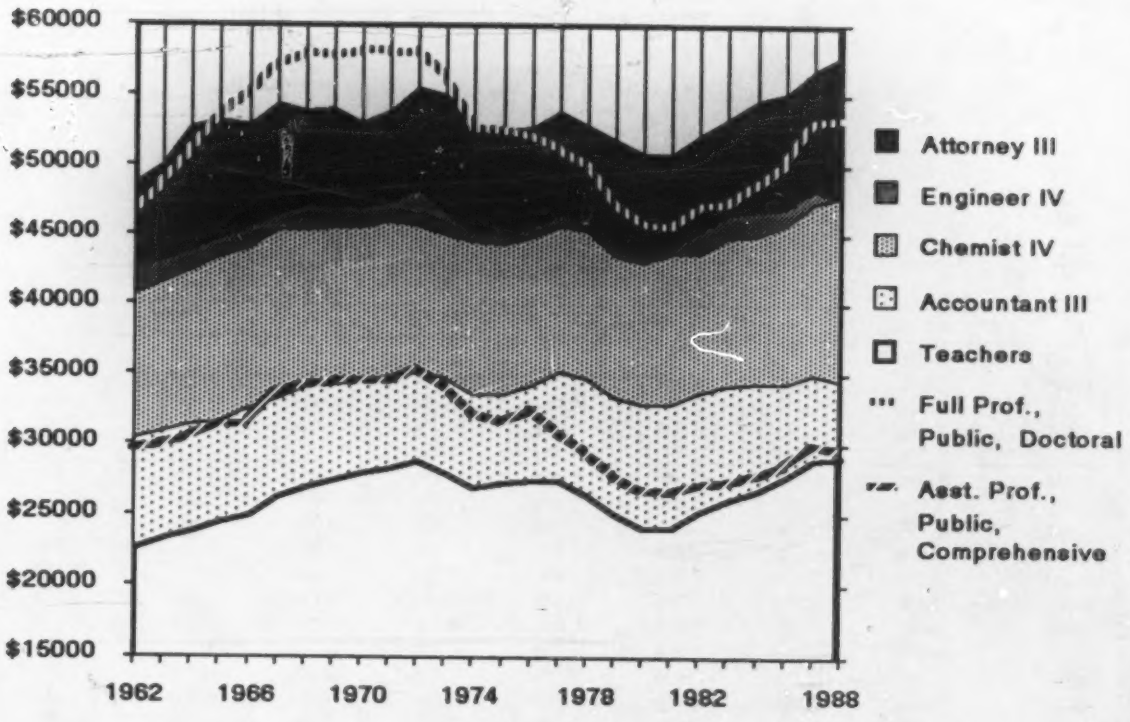
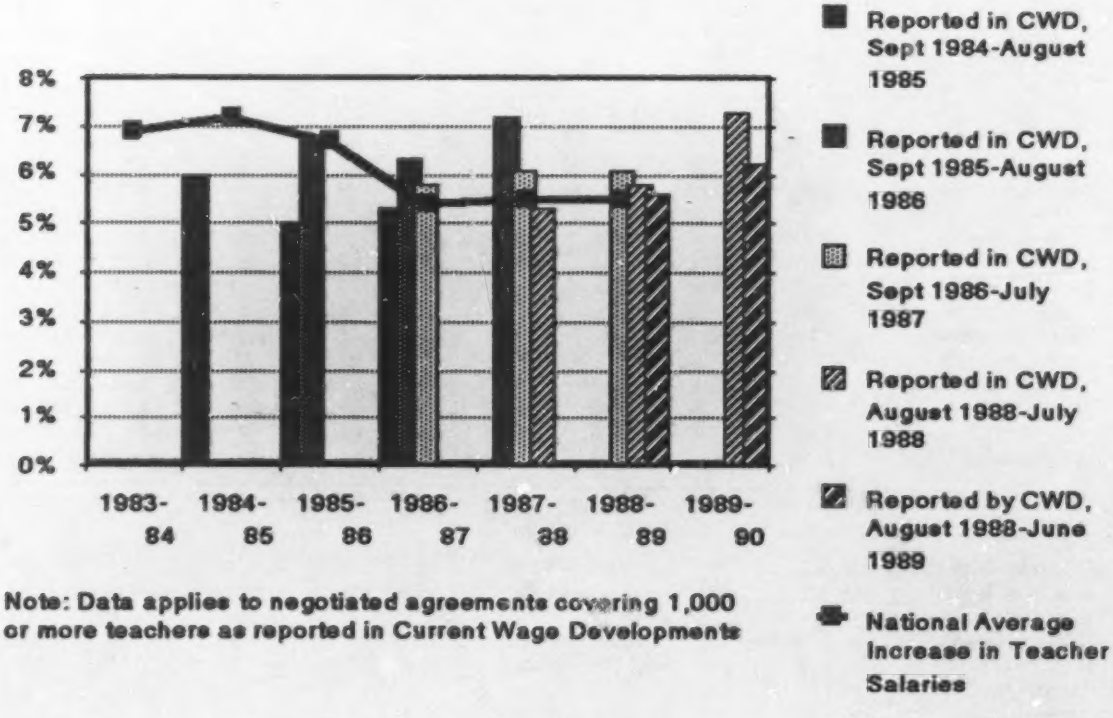


Figure II-7

Average Annual Salary Adjustments for Teachers --Projections for 1989-90



Note: Data applies to negotiated agreements covering 1,000 or more teachers as reported in Current Wage Developments

Table II–4

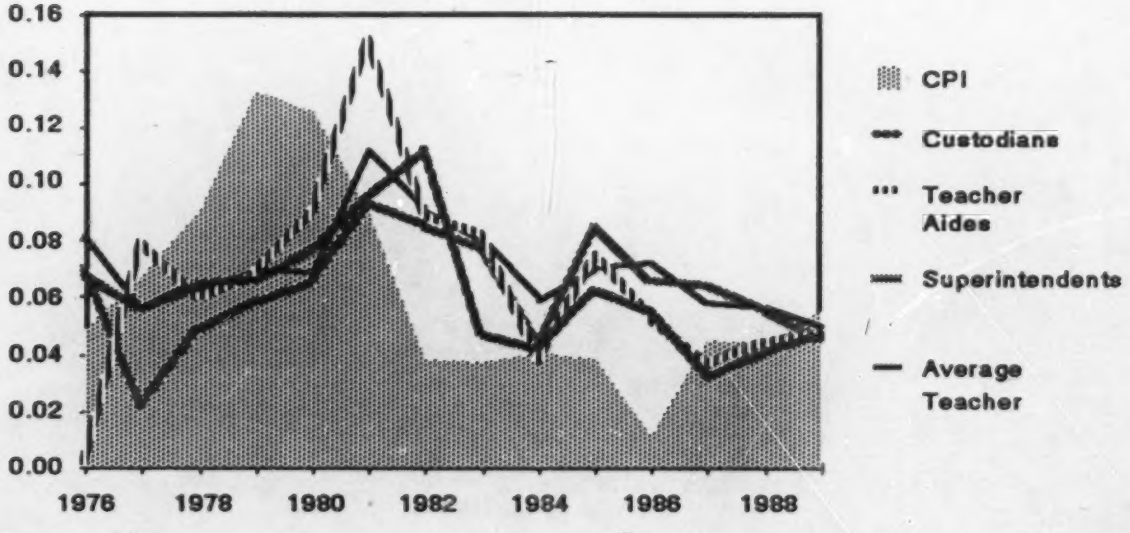
SALARIES OR EARNINGS OF NONTEACHING SCHOOL PERSONNEL, 1975–76 TO 1988–89

	1975–76	1977–78	1979–80	1981–82	1983–84	1985–86	1987–88	1988–89	1975–76 To 1988–89
Teachers–Average	$12,437	$13,941	$15,913	$19,275	$22,039	$25,276	$28,230	$29,608	$18,101
Teachers–Beginning	8,611	9,515	10,657	12,595	14,278	16,692	18,657	19,571	10,960
Superintendents	32,527	34,875	39,344	46,664	52,483	60,707	68,147	71,190	40,802
H.S. Principals	23,306	25,642	29,207	34,776	39,334	43,793	50,512	52,987	30,093
Secretaries									
Central Office	7,929	9,023	10,331	12,718	14,366	16,383	18,220	19,045	11,727
School Building	6,521	7,328	8,348	10,301	11,613	13,233	14,749	15,364	9,318
Hourly Workers									
Instructional Aides	$2.92	$3.34	$3.89	$4.88	$5.48	$6.20	$6.72	$7.05	$4.14
Custodians	3.78	4.25	4.88	5.95	6.49	7.28	7.82	8.19	4.65
Cafeteria Workers	2.83	3.24	3.78	4.57	5.09	5.76	6.23	6.56	3.95
Bus Drivers	4.04	4.59	5.21	6.26	6.89	7.72	8.31	8.78	5.03
ANNUAL PERCENT INCREASE									
Teachers–Average	8.1%	6.3%	6.8%	9.0%	5.9%	7.2%	5.6%	4.9%	157.3%
Teachers–Beginning	6.9%	4.7%	5.9%	7.9%	5.5%	7.8%	5.6%	4.9%	127.3%
Superintendents	7.0%	4.9%	6.6%	8.5%	4.4%	6.6%	5.5%	4.5%	134.3%
H.S. Principals	1.8%	5.7%	6.5%	7.9%	4.6%	4.0%	5.5%	4.9%	131.4%
Secretaries									
Central Office	8.3%	6.8%	8.1%	9.9%	5.3%	6.8%	6.0%	4.5%	160.2%
School Building	7.9%	7.0%	7.4%	10.1%	5.5%	5.8%	5.8%	4.2%	154.1%
Hourly Workers									
Instructional Aides	0.3%	6.0%	9.0%	8.9%	3.8%	5.3%	4.5%	4.9%	142.3%
Custodians	6.8%	6.5%	7.7%	11.2%	4.2%	5.5%	4.1%	4.7%	131.4%
Cafeteria Workers	8.4%	8.0%	8.6%	9.6%	4.5%	6.3%	5.2%	5.3%	151.3%
Bus Drivers	7.7%	7.2%	5.7%	8.9%	5.0%	6.2%	3.1%	5.7%	134.1%
1989 DOLLARS									
Teachers–Average	$27,032	$26,049	$23,326	$24,982	$26,476	$28,936	$29,636	$29,608	$3,380
Teachers–Beginning	18,716	17,779	15,621	16,324	17,153	19,109	19,586	19,571	855
Superintendents	70,699	65,165	57,671	60,482	63,049	69,497	71,540	71,190	1,927
H.S. Principals	50,657	47,913	42,812	45,073	47,253	50,134	53,027	52,987	805
Secretaries									
Central Office	17,234	16,860	15,143	16,484	17,258	18,755	19,127	19,045	2,365
School Building	14,174	13,693	12,237	13,351	13,951	15,149	15,483	15,364	1,583
Hourly Workers									
Instructional Aides	$6.35	$6.24	$5.70	$6.33	$6.58	$7.10	$7.05	$7.05	$0.42
Custodians	8.22	7.94	7.15	7.71	7.80	8.33	8.21	8.19	0.12
Cafeteria Workers	6.15	6.05	5.54	5.92	6.11	6.59	6.54	6.56	0.61
Bus Drivers	8.78	8.58	7.64	8.11	8.28	8.84	8.72	8.78	0.23

Data Source: Educational Research Service

Figure II-8

Annual Rate of Increase in Teacher Salaries and Earnings for Selected Nonteaching Positions



III. Beginning Teacher Salaries, the Hiring of Beginning and Reentering Teachers and Teacher Retirement

Great attention has been focused on beginning teacher salaries during the 1980s. The average beginning teacher salary reported in this survey is $19,598 for 1988-89, up 5.8 percent from the previous year. The Educational Research Service, in its annual survey of school districts across the nation, reports a $19,571 figure for the average of the "lowest paid teacher," up 4.9 percent from the previous year. A wage survey by the Department of Defense of the 170 school districts serving cities with populations of more than 100,000 yielded an average beginning teacher salary of $20,270, up 5.2 percent from the previous year.

Beginning Teacher Salary by State. Fourteen states have average beginning salaries greater than $20,000. Alaska, California, Connecticut, Hawaii, New York and New Jersey have actual starting salaries in excess of $21,000 while only Idaho, Louisiana, Utah, North Dakota, and South Dakota report average starting salaries below $16,000. As shown in Table III-1, beginning teachers in the District of Columbia, Hawaii, Tennessee and Wisconsin experienced a double-digit salary jump over beginning teachers in 1987-88. The actual average beginning salary stands at 66.1 percent of the U.S. average. This ratio varied from a low of 51 percent Rhode Island to 74 percent in Arkansas. Southern states typically have higher starting salaries relative to the average salary.

Trends in Beginning Teacher Salaries Relative to Expected Salaries of College Graduates in the Private Sector. Beginning offers in business for new college graduates in other white-collar occupations remain high compared to beginning teachers, ranging from 52 percent more for engineers to 5 percent more for liberal arts graduates in 1988. The earnings advantage of these white-collar occupations, however, is at about the lowest level since about 1978. During 1988, accountants, sales/marketing and liberal arts graduates had higher beginning salary growth than teachers. If beginning teacher salaries grow at an estimated rate of 5.0%, five occupations will make gains on teachers: accountants (up 9.2 percent), sales and marketing majors (up 11.9 percent), liberal arts graduates (up 7.8 percent), business administration (up 6.3 percent), and Chemistry (up 10.9 percent). Table III-3 contains these data, and Figure III-1 graphs the relationship between starting salaries.

Starting salaries in other white-collar occupations show less stability among each other over time than do the average salaries. Private employers tend to make labor market adjustments through the hiring of, and salaries given to, beginning employees. As in the average salary comparison, beginning salaries in other occupations gained on teacher salaries from the mid-1970s until about 1982 (except for accounting, which has shown a slow but continuous decline relative to beginning teacher salaries through

1985). While beginning teachers are just $200 short of their highest-ever salary (in 1989 dollars), all of the other occupations except computer science and math/statistics have yet to regain previous purchasing power experienced in the previous decade.

New Hires Entering Teaching for the First Time. For 37 states reporting data for 1987-88, beginning teachers comprised as much as 3.6 percent of classroom teachers, as shown in Table III-3. Arkansas, Florida, Louisiana, Tennessee, Texas and Utah reported that more than 5 percent of their teachers were beginning teachers in 1987-88. All pay less than the national average teacher salary. For 33 states reporting data for 1988-89, beginning teachers comprised only 3.8 percent of classroom teachers. Florida, Georgia, North Dakota, South Dakota, Tennessee and Utah reported increases exceeding 5 percent. Among states reporting data for both years, 11 states indicated that they hired fewer new teachers, 2 reported no change and 24 reported hiring more new teachers. Conclusions based on these data should be strictly speculative, given the many states that do not collect these data, the inconsistencies in definitions among states, and the utilization of an unweighted average.

Reentering Teachers. The definition of "reentering teacher" varies from state to state, but the figure generally represents experienced teachers who did not teach in a public school the prior year. Reentering teachers could include reappointments after layoffs, maternity reinstatements and illness reinstatements. The data generally include out-of-state experienced teachers and teachers from private school backgrounds, even if there is no break in service. Specific exceptions to these generalizations noted by State Departments of Education are footnoted in Table III-4. A study in Connecticut (Connecticut State Department of Education, Teacher Supply and Demand, 1985) shows that during 1983-84 only 29 percent of leaving teachers retired. Other reasons for leaving included maternity/childbearing (15.0 percent), entering another profession (11.4 percent), spouse left the state (7.8 percent) and reduction in force (5.0 percent). Connecticut also reports that returning experienced teachers are more likely to be female (85 percent), be less than 40 years old (70 percent) and have less than 5 years of experience (58 percent).

Based on data from 25 states in 1987-88 and 19 states in 1989-90 listed in Table III-4, the number of experienced teachers reentering the classroom exceeded the number of beginning teachers in both 1987-88 and 1988-89. Returning experienced teachers comprised as much as 4.1 percent (unweighted average) of classroom teachers in 1987-88 and 4.3 percent in 1988-89. Again, conclusions based on this data should be considered very speculative.

Teacher Retirement. Approximately 31 states reported retirement figures for either 1986-87 or 1987-88, as shown in Table III-5. The average retirement rate (unweighted) decreased between the two years from 2.2 percent to 2.0 percent, ranging from a low of 1.0 percent in South Dakota to 3.9 percent in Ohio. The number of retirements grew by more than 20 percent in a single year in Arkansas and North Dakota.

More than half of the states reported a decline in the number of retirements.

Interstate comparisons should be considered strictly speculative because most state retirement systems cannot distinguish between retirees who had been classroom teachers the previous year, and all other entrants to the retirement system. Other entrants could include former teachers newly eligible to draw retirement benefits and nonteaching professional personnel including administrators. Some teachers are eligible to draw retirement benefits in two or more states.

TABLE III–1

ACTUAL AVERAGE BEGINNING BA TEACHER SALARIES, 1987–88 AND 1988–89

	State	Beginning Salary 1988–89	Average Salary 1988–89	Beginning/ Average Salary	Beginning Salary 1987–88	Increase in: Beginning Salary	Increase in: Average Salary
1	Alaska	$27,310 b	$41,832	64.3%	$26,880	1.6%	1.6%
2	California	23,922 b	35,172 b	64.3%	22,632	5.7%	6.1%
3	New York	23,000 c	36,654 c	57.8%	21,181 c	8.6%	6.2%
4	Hawaii	22,298	31,307	62.5%	19,563	14.0%	10.1%
5	Connecticut	22,276	37,659	55.0%	20,712	7.6%	11.5%
6	D.C.	21,357	36,787 b	52.0%	19,116	11.7%	6.0%
7	New Jersey	21,250	32,862	60.6%	19,900	6.8%	6.8%
8	Maryland	20,756	33,900	57.5%	19,490	6.5%	9.6%
9	Florida	20,450 b	26,971 a	71.6%	19,300	6.0%	7.0%
10	Minnesota	20,152 a	31,395 a	62.5%	19,625 a	2.7%	5.0%
11	Arizona	20,150 b	28,499	67.7%	19,300 b	4.4%	4.1%
12	Massachusetts	20,150 b	32,200 b	57.8%	18,600 b	8.3%	6.0%
13	Michigan	20,150 b	35,530	53.8%	19,100 b	5.5%	4.3%
14	Pennsylvania	20,050 b	31,248	58.9%	18,400 b	9.0%	7.1%
15	Virginia	19,800 b	29,056 a	63.5%	18,439	7.4%	6.9%
16	Nevada	19,570	28,836	64.2%	18,523	5.7%	4.5%
17	Alabama	19,565 b	25,190 a	72.3%	18,200 b	7.5%	8.0%
18	Texas	19,408 a	26,513 a	70.4%	18,662	4.0%	3.7%
19	Wisconsin	19,235	31,046	55.9%	17,362	10.8%	6.3%
20	Wyoming	19,076	27,689	68.2%	18,890	1.0%	2.0%
21	New Mexico	19,016	24,554	72.4%	17,769	7.0%	2.5%
22	Iowa	19,015	25,884	72.2%	18,683	1.8%	4.1%
23	Delaware	19,008	31,585	57.7%	18,224	4.3%	6.8%
24	New Hampshire	19,000 b	26,703	64.8%	17,300 b	9.8%	11.2%
25	Oregon	18,915 g	29,385 g	61.3%	18,022 g	5.0%	4.7%
26	Illinois	18,643	31,195	57.0%	17,794	4.8%	5.2%
27	Missouri	18,620	25,981	65.8%	17,105	8.9%	5.1%
28	Indiana	18,452 a	29,169 a	58.6%	17,085	8.0%	7.9%
29	Rhode Island	18,417	34,234 a	51.0%	17,447	5.6%	4.2%
30	North Carolina	18,330	25,650	68.4%	17,540	4.5%	3.0%
31	Kansas	18,315	25,992 b	66.9%	17,377	5.4%	5.5%
32	South Carolina	18,092	25,060 a	70.6%	17,683	2.3%	2.7%
33	Mississippi	18,000 b	22,579	72.6%	16,400 b	9.8%	9.8%
34	Georgia	17,823	26,920	64.3%	17,304	3.0%	4.6%
35	Washington	17,725	29,146 g	59.0%	17,208	3.0%	3.3%
36	Colorado	17,375	29,557 f	56.9%	16,813	3.3%	3.2%
37	Ohio	17,041	29,166	56.1%	16,374	4.1%	5.7%
38	Montana	17,000 a	24,421	69.6%	17,000 b	0.0%	2.7%
39	Tennessee	16,925	25,619	59.9%	15,350	10.3%	7.7%
40	Nebraska	16,722 a	23,845 a	65.4%	15,587	7.3%	5.1%
41	Kentucky	16,672	24,920 a	64.8%	16,150	3.2%	2.8%
42	Oklahoma	16,645 b	23,400 a	70.2%	16,432	1.3%	2.8%
43	Maine	16,603	24,938	63.2%	15,762	5.3%	6.5%
44	Arkansas	16,444	21,736	73.7%	16,012	2.7%	2.9%
45	Vermont	16,392	26,819	55.9%	14,996	9.3%	9.4%
46	Louisiana	15,648 a	22,469	66.6%	14,966	4.6%	5.9%
47	North Dakota	15,600	22,249	68.4%	15,218	2.5%	2.7%
48	Utah	15,409	23,023 a	66.5%	15,315	0.6%	2.0%
49	South Dakota	15,346	20,525	73.2%	15,026	2.1%	3.9%
50	Idaho	15,252	22,732	65.1%	14,793	3.1%	2.2%
51	West Virginia	15,055	21,904	68.7%	15,055	0.0%	0.8%
	U.S. AVERAGE	$19,598	$29,629	66.1%	$18,517	5.8%	5.5%

a=preliminary or estimate; b=AFT estimate; c=median, f=calendar year; g=includes 6% pension pick-up.

TABLE III–2

BEGINNING TEACHER SALARIES AND EXPECTED SALARIES OF COLLEGE GRADUATES TO BE HIRED

	1972	1974	1976	1978	1980	1982	1984	1986	1987	1988	1989
Teaching	$6,970	$8,058	$9,085	$10,062	$11,676	$13,539	$15,482	$17,667	$18,657	$19,571	$20,550 *
Engineering	10,608	11,556	13,980	16,680	20,136	25,128	26,844	28,512	28,932	29,820	30,600
Accounting	10,356	11,040	12,396	13,464	15,720	18,876	20,172	21,216	22,512	24,324	26,568
Sales/Marketing	8,904	9,864	11,316	12,636	15,936	18,072	19,620	20,688	20,232	22,848	25,572
Business Admin.	8,568	9,000	10,224	12,048	14,100	17,940	19,416	21,324	21,972	22,920	24,372
Liberal Arts	8,328	8,892	10,020	11,400	13,296	16,956	19,344	21,060	20,508	22,596	24,348
Chemistry	9,840	10,200	11,928	14,700	17,124	21,552	24,192	24,264	27,048	25,692	28,488
Math or Statistics	9,276	10,680	12,384	13,632	17,604	20,892	22,416	23,976	25,548	26,112	26,340
Economics/Finance	9,240	10,176	10,644	12,072	14,472	18,564	20,484	22,284	21,984	23,136	25,332
Computer Science		9,672		14,160	17,712	22,068	24,864	26,172	26,280	27,372	27,756
Others	9,264	10,344	11,820	13,848	17,544	20,460	23,136	26,724	21,948	26,316	25,272

(1989 Dollars)

	1972	1974	1976	1978	1980	1982	1984	1986	1987	1988	1989
Teaching	20,746	19,640	19,747	18,801	17,115	17,548	18,599	20,225	20,452	20,545	20,550
Engineering	31,574	28,166	30,386	31,167	29,516	32,569	32,248	32,640	31,715	31,305	30,600
Accounting	30,824	26,909	26,943	25,158	23,043	24,465	24,233	24,288	24,677	25,535	26,568
Sales/Marketing	26,502	24,042	24,596	23,611	23,359	23,423	23,570	23,684	22,178	23,986	25,572
Business Admin.	25,502	21,936	22,222	22,512	20,668	23,252	23,325	24,412	24,085	24,061	24,372
Liberal Arts	24,788	21,673	21,779	21,301	19,490	21,977	23,239	24,109	22,481	23,721	24,348
Chemistry	29,288	24,861	25,926	27,468	25,101	27,934	29,063	27,777	29,650	26,971	28,488
Math or Statistics	27,610	26,031	26,917	25,472	25,804	27,078	26,929	27,448	28,005	27,412	26,340
Economics/Finance	27,503	24,803	23,135	22,557	21,213	24,061	24,608	25,511	24,099	24,288	25,332
Computer Science		23,574		26,458	25,963	28,602	29,870	29,962	28,808	28,735	27,756
Others	27,574	25,212	25,691	25,876	25,716	26,518	27,794	30,594	24,059	27,626	25,272

* estimated to be a 5.0 percent increase.

(Table III-2 Continued)

RATIO OF EXPECTED SALARIES OF COLLEGE GRADUATES TO BE HIRED TO BEGINNING TEACHERS SALARIES

	1972	1974	1976	1978	1980	1982	1984	1986	1987	1988	1989
Teaching	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Engineering	1.52	1.43	1.54	1.66	1.72	1.86	1.73	1.61	1.55	1.52	1.49
Accounting	1.49	1.37	1.36	1.34	1.35	1.39	1.30	1.20	1.21	1.24	1.29
Sales/Marketing	1.28	1.22	1.25	1.26	1.36	1.33	1.27	1.17	1.08	1.17	1.24
Business Admin.	1.23	1.12	1.13	1.20	1.21	1.33	1.25	1.21	1.18	1.17	1.19
Liberal Arts	1.19	1.10	1.10	1.13	1.14	1.25	1.25	1.19	1.10	1.15	1.18
Chemistry	1.41	1.27	1.31	1.46	1.47	1.59	1.56	1.37	1.45	1.31	1.39
Math or Statistics	1.33	1.33	1.36	1.35	1.51	1.54	1.45	1.36	1.37	1.33	1.28
Economics/Finance	1.33	1.26	1.17	1.20	1.24	1.37	1.32	1.26	1.18	1.18	1.23
Computer Science		1.20		1.41	1.52	1.63	1.61	1.48	1.41	1.40	1.35
Others	1.33	1.28	1.30	1.38	1.50	1.51	1.49	1.51	1.18	1.34	1.23

ANNUAL PERCENT INCREASE IN BEGINNING TEACHER SALARIES AND EXPECTED SALARIES OF COLLEGE GRADUATES

	1974	1976	1978	1980	1982	1984	1986	1987	1988	1989
Teaching	7.0%	5.5%	5.7%	9.6%	7.5%	8.4%	5.8%	5.6%	4.9%	5.0%
Engineering	6.4%	9.7%	11.9%	10.1%	12.3%	4.0%	6.1%	1.5%	3.1%	2.6%
Accounting	2.0%	4.3%	5.2%	6.6%	11.2%	3.6%	2.9%	6.1%	8.0%	9.2%
Sales/Marketing	2.2%	9.4%	7.7%	21.7%	4.9%	5.2%	0.3%	-2.2%	12.9%	11.9%
Business Admin.	3.9%	4.7%	13.2%	4.7%	10.7%	4.6%	7.2%	3.0%	4.3%	6.3%
Liberal Arts	2.3%	7.6%	9.7%	4.3%	10.3%	5.9%	11.9%	-2.6%	10.2%	7.8%
Chemistry	0.8%	7.1%	10.6%	8.3%	10.3%	8.3%	0.2%	11.5%	-5.0%	10.9%
Math or Statistics	11.8%	4.0%	8.7%	21.7%	12.3%	3.3%	5.6%	6.6%	2.2%	0.9%
Economics/Finance	7.3%	-3.1%	6.7%	10.7%	10.0%	3.8%	6.3%	-1.3%	5.2%	9.5%
Computer Science				14.8%	8.4%	7.1%	8.3%	0.4%	4.2%	1.4%
Others	6.7%	13.0%	11.8%	20.5%	2.2%	9.4%	21.6%	-17.9%	19.9%	-4.0%

Figure III-1

Trends in Beginning Salaries for College Graduates in Selected Occupations

(1989 Dollars)

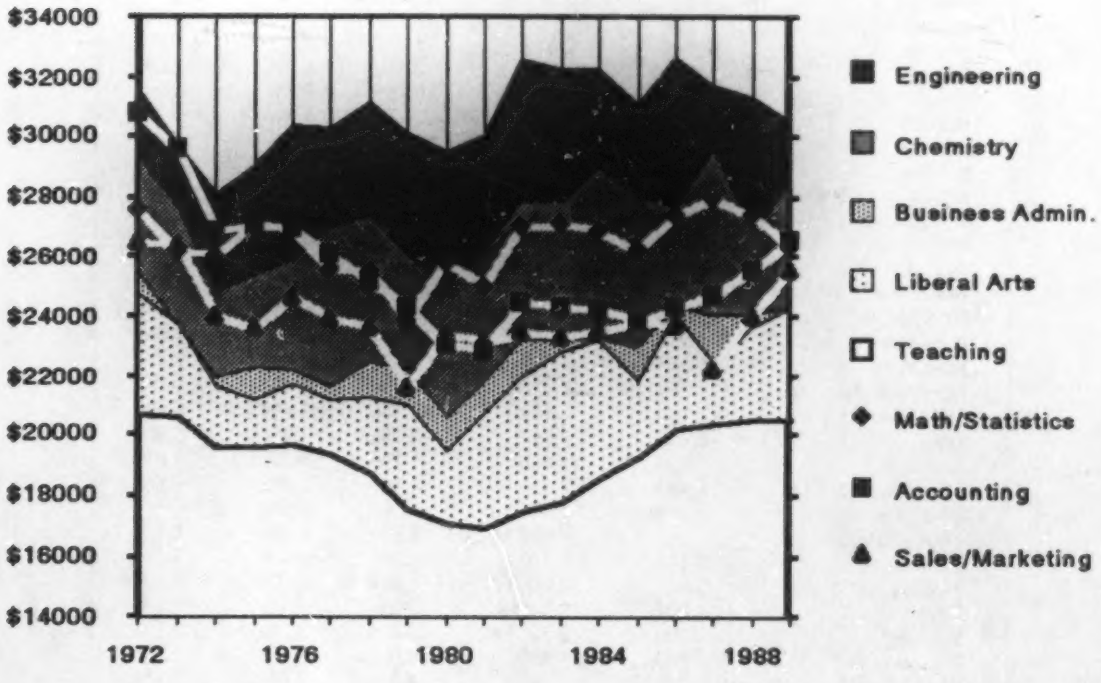


TABLE III–3

NEW HIRES ENTERING TEACHING FOR THE FIRST TIME FOR STATES REPORTING DATA

State	Beginning Teachers 1987–88	Beginning Teachers 1988–89	Percent Change	Percent of Classroom Teachers 1987–88	Percent of Classroom Teachers 1988–89
Arkansas	1,307	1,147	-12.2%	5.1%	4.0%
California	9,000			4.6%	
Colorado	1,181	958	-18.9%	3.8%	3.1%
Connecticut	700	811	15.9%	2.0%	2.3%
Delaware	104	86	-17.3%	1.7%	1.5%
D.C.	160	205	28.1%	2.6%	3.1%
Florida	5,251	5,710	8.7%	5.5%	5.7%
Georgia	2,915 a	3,228 a	10.7%	4.7%	5.2%
Idaho	497	510	2.6%	4.8%	4.9%
Illinois	2,641	2,613	-1.1%	2.5%	2.5%
Indiana	985	849 a	-13.8%	1.8%	1.6%
Iowa	766	717	-6.4%	2.5%	2.3%
Kansas	503			1.8%	
Kentucky	1,297	1,465	13.0%	3.7%	4.1%
Louisiana	2,533	2,600 a	2.6%	6.0%	6.0%
Maine	476	475	-0.2%	3.4%	3.3%
Maryland	1,184			3.0%	
Minnesota	1,395	1,482	6.2%	3.3%	3.5%
Missouri	2,066	2,275	10.1%	4.1%	4.5%
Nebraska	767	855	11.5%	4.4%	4.8%
New Jersey	956 b	1,118 b	16.9%	1.2%	1.4%
New Mexico	552	667	20.8%	3.6%	4.3%
New York	4,888 ac	5,652 ac	15.6%	2.8%	3.2%
North Carolina	2,225 d	2,893	30.0%	3.7%	4.7%
North Dakota	185	460	148.6%	2.4%	6.0%
Ohio	2,893	2,657	-8.2%	2.9%	2.6%
Oregon	850	840	-1.2%	3.4%	3.3%
Pennsylvania	2,480	2,600	4.8%	2.4%	2.5%
South Carolina	800 a			2.2%	
South Dakota	385	409	6.2%	4.6%	5.0%
Tennessee	3,596	3,171	-11.8%	8.4%	7.3%
Texas	9,625	10,000 a	3.9%	5.1%	5.2%
Utah	1,304	1,015	-22.2%	7.4%	5.5%
Virginia	2,200 a	2,200 a	0.0%	3.7%	3.6%
Washington	369	439	19.0%	1.0%	1.1%
West Virginia	766	797	4.0%	3.4%	3.6%
Wisconsin	1,584	1,688	6.6%	3.3%	3.5%
Unweighted Average			8.3%	3.6%	3.8%

a=Estimate or preliminary.
b=Includes only teachers entering directly from college.
c=New hires with no prior teaching experience.
d=Teachers under age 27 credited with zero years of teaching experience.

TABLE III–4

EXPERIENCED TEACHERS REENTERING TEACHING FOR STATES REPORTING DATA

State	Reentering Teachers 1987–88	Reentering Teachers 1988–89	Percent Increase	Percent of Classroom Teachers 1987–88	Percent of Classroom Teachers 1988–89	Percent of New Hires* 1987–88	Percent of New Hires* 1988–89
Arkansas	942 b	708 b	-24.8%	3.7%	2.5%	41.9%	38.2%
Connecticut	2,377 c	1,937 c	-18.5%	6.8%	5.4%	77.3%	70.5%
Delaware	84 d	69 d	-17.9%	1.4%	1.2%	44.7%	44.5%
D.C.	367	232	-36.8%	5.9%	3.5%	69.6%	53.1%
Florida	4,728 ca	5,501 ca	16.3%	4.9%	5.5%	47.4%	49.1%
Georgia	1,135 f	900 f	-20.7%	1.8%	1.4%	28.0%	21.8%
Illinois	3,589	3,485	-2.9%	3.4%	3.3%	57.6%	57.1%
Indiana	1,412 b	1,188 b	-15.9%	2.6%	2.2%	58.9%	58.3%
Kansas	423			1.6%		45.7%	
Kentucky	1,986	1,927	-3.0%	5.6%	5.4%	60.5%	56.8%
Maryland	1,029 g			2.6%		46.5%	
Minnesota	967 i	794 i	-17.9%	2.3%	1.9%	40.9%	34.9%
Missouri	2,363	2,262	-4.3%	4.7%	4.5%	53.4%	49.9%
New Jersey	3,498 h	3,998 h	14.3%	4.4%	4.9%	93.3%	78.1%
New Mexico	1,481	1,454	-1.8%	9.8%	9.3%	72.8%	68.6%
New York	11,945 g	13,527 g	13.2%	7.0%	7.8%	71.0%	70.5%
North Carolina	2,244 i	2,506 i	11.7%	3.8%	4.1%	50.2%	46.4%
North Dakota	464			0.8%		71.5%	
Ohio	5,003	4,639	-7.3%	5.0%	4.6%	63.4%	63.6%
Oregon	1221 j			4.6%		58.1%	
South Carolina	2,500 ak			7.0%		75.8%	
South Dakota	342	389	13.7%	4.1%	4.7%	47.0%	48.7%
Texas	13,049	13,000 a	-0.4%	6.9%	6.8%	57.6%	56.5%
Washington	797 g	753 g	-5.5%	2.1%	1.9%	68.4%	63.2%
Wisconsin	277			0.6%		14.9%	
Unweighted Average			-5.7%	4.1%	4.3%	56.6%	54.2%

a=Estimate or preliminary.
b=Does not include transfers from other states, school districts or private schools.
c=Includes teachers with out-of-state experience.
d=Includes only those not employed in teaching last year.
e=Estimated reentry is the sum of resignations and the increase in total teachers minus the number of first year teachers.
f=Projected number with certification eligibility and is likely to include those who taught elsewhere.
g=Includes out-of-state and private school transfers, but not transfers between districts.
h=Only public school teachers reentering public schools after a leave.
i=Those who reentered teaching and taught in another state: 765 in 1987-88 and 950 1988-89.
j=Includes interdistrict transfers.
k=Newly hired teachers over age 26 with any kind of previous teaching experience.
l=Does not include teachers who taught in another state

Table III–5

TEACHER RETIREMENT RATE FOR STATES REPORTING DATA

State	Retiring Teachers 1986–87	Retiring Teachers 1987–88	Percent increase	Percent of Classroom Teachers* 1986–87	Percent of Classroom Teachers* 1987–88
Arkansas	740 b	1,030 b	39.2%	2.9%	3.6%
Connecticut	768	687 c	-10.5%	2.2%	1.9%
Delaware	143 d	151 d	5.6%	2.4%	2.6%
D.C.		132			2.0%
Florida	1,498	1,572 a	4.9%	1.6%	1.6%
Georgia	2,018	1,908	-5.5%	3.2%	3.1%
Hawaii	262	136	-48.1%	3.4%	1.7%
Idaho	191	194	1.6%	1.9%	1.9%
Illinois	1,250	1,373 e	9.8%	1.2%	1.3%
Indiana	1,078			2.0%	
Kentucky	815	661	-18.9%	2.3%	1.8%
Louisiana	1,411 a	1,162 a	-17.6%	3.3%	2.7%
Maine	192	191	-0.5%	1.4%	1.3%
Maryland	451	487 a	8.0%	1.1%	1.2%
Massachusetts	728	710	-2.5%	1.2%	1.2%
Minnesota	1069 h	549	-48.6%	2.5%	1.3%
New Jersey	1,142	1,069	-6.4%	1.4%	1.3%
New Mexico	252 f	241 f	-4.4%	1.7%	1.5%
New York	6,039	6,400 a	6.0%	3.5%	3.7%
North Carolina	1,071			1.8%	
North Dakota	200	250	25.0%	2.6%	3.2%
Ohio	3,494 g	3,938 g	12.7%	3.5%	3.9%
Oregon	609	605	-0.7%	2.4%	2.4%
Pennsylvania	1,623	1,529	-5.8%	1.6%	1.5%
South Dakota	146	82	-43.8%	1.8%	1.0%
Tennessee	818	631	-22.9%	1.9%	1.5%
Vermont	133	124	-6.8%	2.0%	1.9%
Virginia	1,624 i			2.7%	
Washington	899	967	7.6%	2.4%	2.5%
West Virginia	470	287	-38.9%	2.1%	1.3%
Wisconsin	760	800	5.3%	1.6%	1.6%
Unweighted Average			-5.8%	2.2%	2.0%

a=Preliminary or estimate.
b=Includes all school district employees except janitors, bus drivers, and cafeteria workers.
c=Estimated 150 teachers delayed retirement due to increased retirement benefits as a result of recent significant salary increases.
d=Based on 75 percent of total teacher attrition
e=Both full-time and part-time teachers
f=Non-returning teachers with at least 25 years of experience.
g=Includes service, survivor benefits and disability retirements.
h=In 1986–87, early retirement provisions stimulated retirement.
h= calendar year.

APPENDIX A

STATE EDUCATION DATA, 1987–88 AND 1988–89

	State	Avg.Sal 1987–88	Avg.Sal 1988–89	Teachers 1987–88	Teachers 1988–89	$/Pupil 1986–87	$/Pupil 1987–88	$/Pupil 1988–89	Min.Sal. 1987–88	Min.Sal. 1988–89	New Teachers 1987–88	New Teachers 1988–89	Re-entering Teachers 1987–88	Re-entering Teachers 1988–89	Teachers Retiring 1986–87	Teacher Retiring 1987–88
1	Alabama	23,320	25,190 a	37,716 d	38,619 d	2,420	2,467 b	2,812 b	18,200 b	19,565 b	NA	NA	NA	NA	NA	NA
2	Alaska	41,190	41,832	6,225	6,319	7,122	6,922 b	6,991 b	26,880	27,310 b	NA	NA	NA	NA	NA	NA
3	Arizona	27,388	26,499	30,707 d	31,911 d	3,436	3,607	3,787 b	19,300 b	20,150 b	NA	NA	NA	NA	NA	NA
4	Arkansas	21,133	21,736	25,572 d	26,495 d	2,558	2,789 b	2,887 b	16,012	16,444	1,307	1,147	942	708	740	1,030
5	California	33,159	35,172 b	195,475	196,521	3,772	3,923	4,091 b	22,632	23,922 b	NA	NA	NA	NA	NA	NA
6	Colorado	28,651 f	29,557 f	31,168	31,398 f	3,814	4,024 b	4,099 b	16,813	17,375	1,181	958	NA	NA	NA	NA
7	Connecticut	33,776	37,659	35,050 d	35,800 d	5,150	5,980	6,730	20,712	22,276	700	811	2,377	1,937	768	687
8	Delaware	29,573	31,585	5,951	5,897	4,429	4,717	5,047 a	18,224	19,008	104	86	84	69	143	151
9	D.C.	34,705	36,787 b	6,232 d	6,572 d	5,153	5,522 b	5,781 b	19,116	21,537	160	205	367	232	NA	132
10	Florida	25,198	26,971 a	95,857 d	99,394 d	3,515	3,679	3,918 b	19,300	20,450 b	5,251	5,710	4,728 a	5,501 a	3,883	4,074
11	Georgia	25,736	26,920	62,280	62,552 b	3,148	3,436 a	3,775 a	17,304	17,823	2,915 a	3,228 a	1,135	900	2,018	1,908
12	Hawaii	28,445	31,307	7,884 d	7,950 d	3,503	3,892 b	4,191 b	19,563	22,296	NA	NA	NA	NA	262	136
13	Idaho	22,242	22,732	10,258	10,425	2,462	2,617 b	2,727 b	14,793	15,252	497	510	NA	NA	191	194
14	Illinois	29,667	31,195	105,217	105,097	3,541	3,721 b	3,982 b	17,794	18,643	2,641	2,613	3,589	3,485	1,250	1,373
15	Indiana	27,028	29,169 a	53,514	53,246 a	3,213	3,506 b	3,822 b	17,085	18,452 a	985	849 a	1,412	1,188 a	NA	NA
16	Iowa	24,858	25,884	30,873 d	31,299 d	3,585	4,047 b	4,564 b	13,683	19,015	766	717	NA	NA	NA	NA
17	Kansas	24,647	25,992 b	27,317	28,122	3,573	3,742 b	3,929 b	17,377	18,315	NA	NA	NA	NA	NA	NA
18	Kentucky	24,253	24,920 a	35,325	35,736	2,483	2,660 b	2,823 b	16,150	16,672	1,297	1,465	1,986	1,927	815	661
19	Louisiana	21,209	22,469	42,433	43,633 a	2,843	2,714 b	2,783 b	14,966	15,648 a	2,533	2,600 a	NA	NA	1,411 a	1,162
20	Maine	23,425	24,938	14,204 d	14,556 b	3,591	3,881	4,386 a	15,762	16,603	476	475	NA	NA	192	191
21	Maryland	30,933	33,900	40,086	40,853	4,211	4,651	4,953 a	19,490	20,756	1,184	NA	1,029	NA	451	487
22	Massachusetts	30,379	32,200 b	59,517 d	60,395 b	4,490	4,919 b	5,263 b	18,600 b	20,150 b	NA	NA	NA	NA	728	710
23	Michigan	34,080	35,530	80,081	79,582 d	3,822	3,964 b	4,241	19,100 b	20,150 b	NA	NA	NA	NA	NA	NA
24	Minnesota	29,900 a	31,395 a	42,133	42,752	3,963	4,229	4,411 a	19,625 a	20,152 a	1,395	1,482	967	794	1,069	549
25	Mississippi	20,562	22,579	26,930	27,367	2,231	2,468 b	2,641 b	16,400 b	18,000 b	NA	NA	NA	NA	NA	NA

APPENDIX A

STATE EDUCATION DATA, 1987–88 AND 1988–89

	State	Avg.Sal 1987–88	Avg.Sal 1988–89	Teachers 1987–88	Teachers 1988–89	$/Pupil 1986–87	$/Pupil 1987–88	$/Pupil 1988–89	Min.Sal. 1987–88	Min.Sal. 1988–89	New Teachers 1987–88	New Teachers 1988–89	Re-entering Teachers 1987–88	Re-entering Teachers 1988–89	Teachers Retiring 1986–87	Teacher Retiring 1987–88
26	Missouri	24,709	25,981	49,874	50,693	3,142	3,356 b	3,395 b	17,105	18,620	2,066	2,275	2,363	2,262	NA a	NA
27	Montana	23,774	24,421	9,659	9,584	3,808	3,808 b	3,844 b	17,000 b	17,000 a	NA	NA	NA	NA	NA	NA
28	Nebraska	22,683	23,845 a	17,614	17,896	3,549	3,773 b	3,962	15,587	16,722 a	767	855	NA	NA	NA	NA
29	Nevada	27,599	28,836	8,348	8,699	3,182	3,438 b	3,786 a	18,523	19,570	NA	NA	NA	NA	NA	NA
30	New Hampshire	24,019	26,703	10,363	10,442	3,603	3,905 b	4,364 b	17,300 b	19,000 b	956	NA	NA	NA	NA	NA
31	New Jersey	30,778	32,862	79,657 b	81,066 b	5,508	6,169 b	6,737 b	19,900	21,250	252	1,118	3,498	3,998	1,142	1,069
32	New Mexico	23,958	24,554	15,175 d	15,669 d	3,071	3,256 b	3,386 b	17,769	19,016	552	667	1,481	1,454	252	241
33	New York	34,500 c	36,654 c	171,521	174,216	5,647	6,080 b	6,479 b	21,181 c	23,000 c	4,888 a	5,652 a	11,945 a	13,527 a	6,039	6,400
34	North Carolina	24,900	25,650	59,718	61,790	2,942	3,392	3,596 b	17,540	18,330	2,225	2,893	2,244	2,506	1,071	NA
35	North Dakota	21,660	22,249	7,655	7,709	3,159	3,159 b	3,303	15,218	15,600	NA	460	NA	NA	200	250
36	Ohio	27,606	29,166	99,641	100,829	3,408	3,651 b	3,869	16,374	17,041	2,893	2,657	5,003	4,639	3,494	3,938
37	Oklahoma	22,773	23,400 a	34,515 d	34,707 b	2,878	2,948 b	3,011 b	16,432	16,645 b	NA	NA	NA	NA	NA	NA
38	Oregon	28,060 g	29,385 g	24,912	25,147	3,888	4,058 b	4,172 b	18,022 g	18,915 g	850	840	NA	NA	609	605
39	Pennsylvania	29,177	31,248	103,307	104,379	4,287	4,569 b	4,974 b	18,400 b	20,050 b	2,480	2,600	NA	NA	1,623	1,529
40	Rhode Island	32,858	34,234 a	8,947	8,931	4,535	4,900	5,292 b	17,447	18,417	NA	NA	NA	NA	NA	NA
41	South Carolina	24,403	25,060 a	35,701	35,877	2,988	3,046 b	3,550 a	17,653	18,092	800 a	NA	2,500 a	NA	NA	NA
42	South Dakota	19,758	20,525	8,338	8,235	2,935	3,026	3,286	15,026	15,346	385	409	342	389	146	82
43	Tennessee	23,785	25,619	42,660	43,330	2,649	2,941	3,165 b	15,350	16,925	3,596	3,171	NA	NA	818	631
44	Texas	25,558	26,513 a	187,974	191,737	3,163	3,238	3,400 a	18,662	19,408 a	9,625	10,000 a	13,049	13,000 a	NA	NA
45	Utah	22,572	23,023 a	17,603	18,456 a	2,242	2,454 a	2,490 a	15,315	15,409	1,304	1,015	NA	NA	NA	NA
46	Vermont	24,507	26,819	6,856	6,700	4,107	4,457	4,614 a	14,996	16,392	NA	NA	NA	NA	133	124
47	Virginia	27,193	29,056 a	59,928 d	60,530 b	3,533	3,843 b	4,109 b	18,439	19,800 b	2,200 a	2,200 a	NA	NA	NA	NA
48	Washington	28,217	29,146 g	37,949	38,827	3,689	4,008	4,339	17,208	17,725	369	439	797	753	899	967
49	West Virginia	21,736	21,904	22,702	22,177	3,493	3,723 b	3,835 b	15,055	15,055	766	797	NA	NA	470	287
50	Wisconsin	29,206	31,046	47,721	48,541	4,020	4,358	4,663 b	17,362	19,235	1,584	1,688	277	NA	760	800
51	Wyoming	27,141	27,689	6,798 d	6,705 b	4,852	4,766	4,814 b	18,890	19,076	NA	NA	NA	NA	NA	NA
	Average/Total	$28,071	$29,629	2,282,741	2,319,365	$3,731	$3,984	$4,246	$18,517	$19,598						

a=preliminary or estimate.
b=AFT estimate.
c=median.
d=U.S. Department of Education data.
f=Calendar year data.
g=Includes pension pick-up.

APPENDIX B

Data Sources

All data comes from the annual AFT Survey of State Departments of Education, except as noted below.

Table I-4

U.S. Department of Labor, Employment and Wages, Annual Averages 1987, November 1988.

U.S. Department of Labor, Employment and Earnings, May 1989. (Used to estimate private sector annual earnings for 1988).

U.S. Department of Labor, Employment and Wages, Annual Averages 1981, November 1982.

Table I-5

U.S. Bureau of Economic Analysis, Survey of Current Business, April 1989.

Table I-6

Technical documentation for the AFT cost-of-living index is available from the AFT Research Department. The methodology supporting the AFT index is in: Walter W. McMahon and Carroll Melton, "Measuring Cost of Living Variation," Industrial Relations, Vol. 17, No. 3, p.331.

Table I-7

U.S. Department of Education, "Public School Revenues and Current Expenditures, 1986-87: Final Tabulations" E.D. TABS, November 1988.

Table II-1

U.S. Bureau of Economic Analysis, The National Income and Product Accounts of the United States 1929-82 and July issues of Survey of Current Business.

U.S. Bureau of the Census, Historical Statistics, Colonial Times to 1970, series D739-764 and D893-904.

National Center of Educational Statistics, Digest of Education Statistics, various issues (used to estimate teacher salaries prior to the 1977-78 school year).

U.S. Department of Labor, CPI Detailed Report, January 1989.

U.S. Department of Labor, recent issues of Current Wage Developments, (used to estimate average annual earnings for 1988).

Blue Chip Economic Indicators, May 10, 1989.

Table II-2

National Center for Educational Statistics, Digest of Education Statistics, various issues (used to estimate teacher salaries prior to the 1977-78 school year).

U.S. Bureau of the Census, Current Population Reports, series P-60.

Table II-3

U.S. Department of Labor, Handbook of Labor Statistics, June 1985.

U.S. Department of Labor, National Survey of Professional, Administrative, Technical and Clerical Pay, March 1988, October 1988.

American Association of University Professors, data derived from the Annual Reports on the "Economic Status of the Profession," published in Academe. (Various years, usually the March-April issues).

Table II-4

Educational Research Service, Salaries Paid Professional Personnel in Public Schools, and Wages and Salaries Paid Support Personnel in Public Schools, ERS: Reston, VA, editions since 1973-74.

Table III-2

Victor Lindquist, The Northwestern Endicott Report, Northwestern University: Evanston, IL, editions since 1973.

Figure 3

National Center for Educational Statistics, Condition of Education, 1983 Edition, 1983.

Various polls by Louis Harris and Associates for the Metropolitan Life Insurance Company including, "The American Teacher 1988: Strengthening the Relationships Between Teachers and Students."

Figure 4

F. Howard Nelson, AFT Local Union Salary Survey, 1989. Washington, D.C.: American Federation of Teachers, March, 1989.

Figure 7

U.S. Department of Labor, Current Wage Developments, all issues since August 1984.

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